

TOXICITY OF
INDUSTRIAL
EFFLUENTS
IN ONTARIO

January 1969 to
December 1981

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Ministry
of the
Environment

The Honourable
Keith C. Norton, Q.C.,
Minister

Gérard J. M. Raymond
Deputy Minister

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1981

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IN ONTARIO

JANUARY 1969 to DECEMBER 1981

Toxicity Unit Staff

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TOXICITY OF INDUSTRIAL EFFLUENTS IN ONTARIO

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PREFACE

"Chemical examination alone of a complex industrial waste does not provide sufficient information on their effects on the aquatic biota for the protection of the aquatic environment. Moreover, the toxicity of a complex mixture of wastes and chemicals cannot be determined by chemical means." (1)

An organism exposed, under controlled conditions, to these mixtures will provide a summated biological response. Such an exposure is the static 96-hour bioassay.

This basic bioassay can answer a number of questions about a substance:

- "is it toxic?
- how toxic?
- does it vary in toxicity?
- what fraction of the waste is most toxic?
- is the available dilution sufficient to protect fish?
- how effective are treatment methods in reducing toxicity?" (2)

The fundamental elements of the basic, short-term bioassay consist of a series of containers holding dilutions of a toxicant, a container of dilution water, and time. An equal number of test animals (usually fish) are put into each container. The number of dead animals in each container is counted and removed at regular, pre-determined periods.

The unit of measurement of the short term bioassay is the median lethal concentration (LC-50). This value is the concentration which is lethal to 50% of the test animals. The LC-50 concentration always has a time qualification attached. Thus, a 96-hour LC-50 is a concentration of a toxicant that will kill half the test organisms in 96 hours. For example, the effluent from a fully bleached sulphate pulp mill might have a typical 96-hour LC-50 of 25% v/v. (A volume/volume dilution of the waste, 75% water/25% effluent will kill

half the test animals in 96 hours). It is important that the LC-50 not be confused with a "safe concentration" of a toxicant. Usually the safe concentration of a substance or effluent is obtained by multiplying the LC-50 value by an appropriate application factor. Generally, those substances or effluents which do not persist or do not bioaccumulate require less dilution (i.e. a numerically larger application factor) to be rendered harmless. Using ammonia as an example such an application factor would be $0.1 \times 96\text{-hour LC-50}$ or $0.1 \times 0.2 \text{ mg/L} = 0.02\text{mg/L}$.

Those substances or effluents which are more persistent or bioaccumulate will require much greater dilution (i.e. a numerically smaller application factor) to achieve a safe, no effect concentration in the environment. Such an application factor would be $0.01 \times 96\text{-hour LC-50}$. Substances in this category would be metals (zinc, mercury) and higher molecular weight chlorinated organics (PCB). The LC-50 itself, therefore, quantifies the potency of a waste (or lethality) and is valuable for comparison of processes, treatments or changes through time.

If an undiluted effluent kills less than half of the test animals in 96 hours then its LC-50 would be theoretically greater than 100% concentration. For practical purposes such an effluent is considered to be marginally lethal. To fully evaluate effluents of this type other bioassay methods involving chronic exposure and/or sub-lethal responses may be required.

More and more industrial and regulatory agencies are turning to the use of bioassays for monitoring and controlling discharges to the aquatic environment. The integrative nature of the test measures the lethality of all the toxicants present acting simultaneously.

National Standards of Effluent Control

The federal government has developed liquid effluent guidelines for a number of industrial sectors. These sectors are the chlor-alkali industry, the pulp and paper industry, the fish processing industry, the meat and poultry processing industry, the potato processing industry, the metal finishing industry and the

petroleum refining industry. Chlor-alkali plants, fish processing plants and metal finishing plants have no fish toxicity testing requirements. Legislation regulations for the remaining industries (pulp and paper, meat and poultry products, potato processing and petroleum refining) include minimum bioassay requirements for effluents.

These requirements are expressed in terms of regulations, guidelines and explanatory notes. The standards represent what the federal government expects of industries as a national minimum acceptable control level.

The regulation is a specific law that applies to all relevant situations. These regulations limit the amount of specific contaminants in effluents and define the frequency of monitoring and reporting.

A guideline is not a specific law. It is a statement indicating what practices will be considered by the Environmental Protection Service to be in compliance with the spirit of the law. Failure to comply with a guideline is not itself an offence; however, it may mean that the law itself (e.g. the general prohibition of deleterious discharges expressed in the Fisheries Act) is being violated.

The toxicity guidelines relate the acute lethality of an effluent to a species of fish and these requirements apply to every relevant plant whether new, expanded, or existing. Acute lethality tests involve exposing specified test organisms to samples of effluent under controlled conditions.

While the regulated industries must comply with the regulations from the day they came into force, the guidelines provide administrative flexibility needed to allow the regulatory agencies and the industries time to negotiate and implement a compliance schedule.

The guidelines are a series of notes and recommended best practices dealing with many of the technical aspects of effluent sampling, preparation of the bioassay sample, fish culture and bioassay management.

There are two basic types of bioassays to be run under these regulations and guidelines. The first test is a 24-hour static bioassay which, run monthly, is designed to inform the plant management of the general, overall efficiency of their effluent treatment system. The governing toxicity test is usually a 96-hour flow through test which is run by the Minister or his agent. The governing test is the one which will be used to establish the compliance of the effluent with the appropriate regulations and/or guidelines.

Metal Mining Liquid Effluent Regulations and Guidelines (3)

Guidelines for the Measurement of Acute Lethality in Liquid Effluents from Metal Mines.

Application

These guidelines apply to every Metal Mine except gold mines.

Objective - Governing Toxicity Test

For the purposes of these Guidelines the objective for each undiluted effluent deposited is that no more than 50% of the fish die in a composite sample within 96 hours when tested according to the procedure described as the Final Evaluation Test Procedure for Acute Lethality. This test is a 96-hour flow through bioassay.

Monitoring: Routine Toxicity Test

A Mine Operator should carry out an acute lethality test on a composite sample of each undiluted effluent deposited or have these tests carried out on his behalf in accordance with the test procedure described as Screening Test Procedure for Acute Lethality, every three months. This test is a 96-hour static bioassay.

Meat and Poultry Products Plant Liquid Effluent Regulations and Guidelines (4)

Application

The guidelines apply to every plant with facilities intended primarily for the slaughtering, dressing, processing or edible or inedible rendering of any meat or poultry products and associated livestock holding and receiving facilities and truck washing areas.

Objectives - Governing Toxicity Test

The effluent deposited by new, expanded or existing plant does not meet the objectives of these guidelines if more than 50% of the test fish die in a 96-hour flow through bioassay.

Monitoring - Routine Toxicity Test

The owner of a new, expanded or existing plant should conduct the acute lethality test on a composite sample as determined by the type and size of plant. The monitoring test is a 96-hour static bioassay.

Petroleum Refinery Effluent Regulations and Guidelines (5)

Application

These guidelines apply to all existing refineries.

Objective - Governing Toxicity Test

For the purpose of these Guidelines, refinery liquid effluent and once-through cooling water that is deposited is not acceptable if more than 50% of the fish die in the bioassay sample when tested according to the bioassay procedure. The governing toxicity test is to be a 96-hour flow-through bioassay.

Monitoring: Routine Toxicity Test

The owner of a refinery is requested to determine once a month or as requested by the Minister the acute toxicity of liquid effluent and once through cooling water being deposited by the refinery by carrying out 24-hour static bioassays. Compliance in this test is indicated by at least 50% survival rate of the fish in the bioassay sample.

Potato Processing Plant Liquid - Effluent Regulations and Guidelines

(6)

Application

These guidelines apply to every potato processing plant.

Objective - Governing Toxicity Test

For the purpose of these guidelines the objective for each undiluted effluent deposited is that no more than 50% of the fish die in a composite sample within 96 hours when tested according to the Test Procedure for 96-hour Acute Lethality Continuous Flow Test.

Monitoring - Routine Toxicity Test

The owner of a plant should carry out an acute lethality test on a composite sample of each undiluted effluent deposited or have these tests carried out on his behalf, in accordance with the Test Procedure for 24-hour Acute Lethality Static Test. Compliance in this test is indicated by at least 50% survival rate of the fish in the bioassay sample.

Guidelines for the Pulp and Paper Effluent Regulations Promulgated
Under the Fisheries Act. (7)

Application

These guidelines apply to all new, expanded, altered or existing mills.

Objective - Governing Toxicity Test

For the purpose of these guidelines the objective is for a mixture of 65% deposited effluent, 35% dilution water to permit at least 80% fish survival in a 96-hour flow through bioassay when tested according to the "Test for Determining Toxicity of Mill Effluent".

Monitoring - Routine Toxicity Test

Two monitoring bioassays are outlined for deposited effluents from the Pulp and Paper industry.

The first test is a 96-hour flow through test similar to the governing toxicity test but using fewer replications and fish. The second test can be either a 96-hour flow through bioassay or a 96-hour test with the test solutions renewed every 24 hours.

It is generally recommended that the first of the monitoring bioassays be run by the regulatory agency while the industry is encouraged to run the second test.

Provincial Standards of Effluent Control

Provincial or local governments may also impose more stringent standards than the federal requirements. The more stringent requirements will prevail.

The Ontario Water Resources Act; Chapter 332, Section 32(8)
prohibits any municipality or person from discharging to water any

substance that may impair water quality. Similarly, in the Ontario Environmental Protection Act Chap 86, Section 14(9) no one may discharge anything to the natural environment that causes or is likely to cause injury or damage, to property, plant or animal life.

Under the Canada-Ontario accord, Ontario has agreed to establish and enforce effluent requirements at least as stringent as the agreed Federal baseline requirements. These requirements will apply immediately to all new or expanded production facilities and as rapidly as possible in all other cases.

The Toxicity Unit of the Water Resources Branch, Limnology and Toxicity Section, maintains facilities at the Rexdale laboratory to complete static and, depending on the logistics, flow through bioassay for the completion of these tests can be made by contacting the Toxicity Unit Laboratory at 416-248---3011.

Summary of Regulatory Bioassays

Industry	Bioassay	
	Monitoring Test	Governing Test
Metal Mining	96-hr Static	96-hr flow through
Meat & Poultry	96-hr Static	96-hr flow through
Petroleum Refinery	24-hr Static	96-hr flow through
Potato Processing	24-hr Static	96-hr flow through
Pulp and Paper	96-hr flow through* 96-hr flow through** or 96-hr Static, renewed**	96-hr flow through

* test run by regulatory agency

** test run by industry

- 1) Standard Methods for the Examination of Water and Wastewater.
14th ed. 1975. Prepared and published jointly by: American Public Health Association, American Water Works Association, Water Pollution Control Federation.

- 2) The A.B.C.'s of Pollutant Bioassay Using Fish. John B. Sprague. Symposium on Environmental Monitoring, June, 1972. Annual Meeting of the American Society for Testing and Materials.
- 3) Metal Mining Liquid Effluent Regulations and Guidelines. Fisheries and Environment Canada, Environmental Protection Service, Regulations Codes and Protocols. Report EPS 1-WP-77-1. Water Pollution Control Directorate, April 1977.
- 4) Meat and Poultry Products Plant Liquid Effluent Regulations and Guidelines. Fisheries and Environment Canada, Environmental Protection Service, Regulations, Codes and Protocols Report E.P.S. 1-WP-77-2. Water Pollution Control Directorate, July, 1977.
- 5) Petroleum Refinery Effluent Regulations and Guidelines. Environment Canada, Environmental Protection Service, Regulations and Codes and Protocols Report E.P.S. 1-WP-74-1. Water Pollution Control Directorate, January 1974.
- 6) Potato Processing Plant Liquid Effluent Regulations and Guidelines. Fisheries and Environment Canada, Environmental Protection Service, Regulations Codes and Protocols Report E.P.S. 1-WP-77-4. Water Pollution Control Directorate, November, 1977.
- 7) Guidelines for the Pulp and Paper Effluent Regulations. Environment Canada, Environmental Protection Service, Regulation Codes and Protocols Report E.P.S. 1-WP-77-2. Water Pollution Control Directorate, May, 1972.
- 8) The Ontario Water Resources Act. Revised Statutes of Ontario, 1970. Chapter 332. March 1977.
- 9) The Environmental Protection Act, 1971. Statutes of Ontario 1971. Chapter 86. October, 1976.

SECTION 1

INTRODUCTION

This record of waterborne industrial waste quality across the province has been compiled under one cover to provide a background for current effluent conditions. The data has been compiled from bioassay tests requested by regional staff, from January 1969 to December 1981. Chemical data, when available, was included. More detailed information would be held by the local regional office.

The review is designed to assist pollution abatement staff compare industrial waste quality through time and within similar industrial groups. This information will be updated at the end of each calendar year.

Locating Industrial Data

Information is separated into two sections.

1) Industry Description Sheets identify:

- company name
- location
- receiving water
- background history
- production output
- effluent flow rate
- chemistry
- comments

2) Bioassay Data Summary Sheets identify:

- company name
- location
- discharge
- test number
- sample date
- static 96 hour LC₅₀ data
- continuous flow 96-hour LC₅₀ data
- comments

Both sections list the industries alphabetically by name.

Indexes

All industries are listed in three indexes for easy cross reference.

- Index I - industries listed by region
- Index II - industries listed by process type
- Index III - industries ranked by lethality for each region
 - industries are ranked according to four categories of lethality from most lethal to non lethal

96-hour LC ₅₀	<10% v/v (most lethal)
	>10% v/v <50% v/v
	>50% v/v <100% v/v
	>100% v/v (non lethal)
-	each industry was placed in the category of its most lethal effluent.

Application

This compendium is designed as a handbook for field use by industrial abatement officers, and to provide easy reference to similar processes for the province. New data may be entered by regional staff to update locale industrial profiles as it is generated.

Bioassay Sample Collection

Generally bioassay samples should be scheduled for testing by contacting the Toxicity Unit (416-248-3011) four weeks in advance. Allowance is made, however, for emergency situations such as spills and fish kills.

Contingency containers should be kept on hand by regional staff for emergency use. Five gallon (20 L) plastic containers will suffice provided they withstand handling during transport. Containers should be rinsed with sample, filled to capacity to exclude air, and kept cool (4°C) if possible. All containers should be labelled indicating company name, location, sample site, date and collection personnel.

A minimum of 20 gallons of sample are required for a regulatory 96-hour static LC₅₀ test using rainbow trout. Smaller volume samples may be tested using other aquatic organisms but should be submitted only when larger volume collections are impossible or impractical. It must be emphasized, however, that small volume samples may produce logistic difficulties which would affect interpretation of the results.

Long-term industrial survey programs may be planned in advance with Toxicity Unit staff in order that major blocks of laboratory time are made available. Bioassay testing protocols can be designed to meet specific needs, as well as to identify and to evaluate the contribution of toxicants in industrial wastes. Recent programs have incorporated a task force approach involving regional staff, laboratory services analytical groups and the Toxicity Unit to provide a more comprehensive investigation.

Acknowledgements

Review and updating of this document was provided as one of the contractual duties provided by EPS consultant support. This support was arranged through a standing agreement with Environment Canada, EPS Ontario Region. EPS support has assisted the Ministry in the collection, testing, reporting and final compilation of biological monitoring of industrial waste discharges throughout the Province.

SECTION 2

INDEX 1
Industries Identified by Region

CENTRAL REGION (C)

Alchem Chemical Co. Ltd.	Burlington
Ashland Oil Co. Ltd.	Mississauga
Borg-Warner	Coburg
British Petroleum (BP)	Bronte
Chemical Development of Canada Co. Ltd.	Longford Mills
Consolidated Bathurst	Whitby
Douglas Aircraft	Malton
Gulf Oil	Clarkson
Kimberly-Clark	Huntsville
Lindsay S.T.P.	Lindsay
P. L. Robertson Co. Ltd	Milton
Shell Canada	Oakville
Skyway S.T.P.	Burlington
Union Carbide	Lindsay

SOUTHEASTERN REGION (SE)

Alexandria Municipal Discharge	Alexandria
Ault's Foods	Winchester
Bakelite Thermosets (formerly Union Carbide)	Belleville
British Cellophane Ltd (B.C.L.)	Cornwall
Canada Starch	Cardinal
Canadian Industries Ltd. (C.I.L.)	Cornwall
Canadian International Paper (C.I.P.)	Hawkesbury
Carnation Foods	Alexandria
Celanese	Cornwall
Celanese	Millhaven
Chromasco	Haley Station
Collie Fabrics	Almonte
Consolidated Textiles	Alexandria
Corby Distillery	Corbyville
Cornwall Chemicals	Cornwall
Cornwall Municipal Discharge	Cornwall
Courtaults	Cornwall
Deloro Smelting and Refining	Deloro
Domtar Chemicals	Trenton
Domtar Fine Papers	Cornwall
Domtar Packaging	Trenton
Dow Badishe	Arnprior
Dupont	Kingston
Dupont	Maitland
Dussek Brothers	Belleville
E. B. Eddy Forest Products	Ottawa
Eurocurtain	Cornwall
Haley Industries	Haley Station
Hawkesbury Municipal Discharge	Hawkesbury
Iroquois Municipal Discharge	Iroquois
Ivaco	L'original
Kraft Foods	Ingleside
Madawaska Mines	Bancroft
Northern Telecom	Ottawa

Nestle's Foods
 Nitrochem
 Rohm and Haas
 Strathcona Paper
 Trent Valley Paper

Chesterville
 Maitland
 Morrisburg
 Strathcona
 Glen Miller

NORTHEASTERN REGION (NE)

Abitibi Price Inc.
 Abitibi Price Inc.
 Abitibi Price Inc.
 Agnew Lake Mine
 Agnico Eagle
 Algoma Steel
 Canadaka Mines
 Canadian Industries Ltd. (C.I.L.)
 Canadian Industries Ltd. (C.I.L.)
 Canadian Smelting and Refining
 Cobalt Camp
 Denison Mines
 Denison Mines
 Dome Mine
 Dupont
 E. B. Eddy Forest Products
 Falconbridge
 Falconbridge
 Falconbridge
 Inco
 Inco
 Inco
 Inco
 Kamkotia Mine
 Kanichee
 Kerr Addison Mine
 Kidd Creek Mines Ltd.
 Lacours Lumber
 MacMillan Bloedel
 Normick Ltd.
 Pamour Mine
 Rio Algom
 Rio Algom
 Rio Algom
 Rio Algom
 Rio Algom
 Schumacher Mine
 Sherman Mine
 Spruce Falls Power & Paper Co.
 Teck Corporation
 Willroy Mine

Iroquois Falls
 Sault Ste Marie
 Smooth Rock Falls
 Agnew Lake
 Glenn Lake
 Sault Ste Marie
 Elliot Lake
 Parry Sound
 Sudbury
 Cobalt
 Farr Creek
 Stanrock
 Denison Property
 Timmins
 North Bay
 Espanola
 Emery Creek
 Fecunis Creek
 Moose Lake
 Coniston
 Copper Cliff
 Nolin's Creek
 Levack
 Timmins
 Temagami
 Virginiatown
 Porcupine
 Calstock
 Sturgeon Falls
 Cochrane
 Timmins
 Crotch Lake
 Nordic Property
 Pronto Property
 Quirke Property
 Panel Mine
 Timmins
 North Bay
 Kapuskasing
 Cart Lake
 Kirkland Lake

NORTHWESTERN REGION (NW)

Abitibi Price Inc.
 Abitibi Price Inc.
 Abitibi Provincial

Fort William
 Thunder Bay
 Port Arthur

American Can of Canada
 Boise-Cascade
 Boise-Cascade
 Bulore Mine
 Campbell-Red Lake
 Dickenson Gold Mines
 Domtar Packaging
 Great Lakes Forest Products
 Great Lakes Forest Products
 Inco
 Industrial Grain Products
 Kimberly-Clark of Canada
 Noranda Mines
 Northern Wood Preservers
 Reichold Chemicals
 Wilanour Resources

Marathon
 Fort Frances
 Kenora
 Red Lake
 Red Lake
 Balmer Lake
 Red Rock
 Dryden
 Thunder Bay
 Shebondowan
 Thunder Bay
 Terrace Bay
 Geco
 Thunder Bay
 Thunder Bay
 Red Lake

SOUTHWESTERN REGION (SW)

Allied Chemicals
 Amerock Ltd.
 B.A.S.F.
 Canadian Industries Ltd. (C.I.L.)
 Chrysler of Canada
 Dow Chemical
 Dupont of Canada
 Esso Chemical
 Ethyl Corporation
 Fiberglass of Canada
 Ford of Canada
 Ford of Canada
 Freedland Industries
 Holmes Insulation
 Imperial Oil (Refinery)
 Ingersoll STP
 Ladney Properties
 Luster Division, National Hardware
 Monsanto Co. Ltd.
 Petrosar
 Polysar
 Scott Road Dump
 Shell Canada
 Suncor
 Tricil
 Welland Chemical
 Windsor Bumper Co.

Amherstburg
 Meaford
 Wyandotte, Michigan
 Courtright
 Windsor
 Sarnia
 Corunna
 Sarnia
 Corunna
 Sarnia
 St. Thomas
 Windsor
 Kingsville
 Sarnia
 Sarnia
 Ingersoll
 Moore Township
 Wallaceburg
 Sarnia
 Moore Township
 Sarnia
 Sarnia
 Corunna
 Sarnia
 Moore Township
 Sarnia
 Moore Township
 Welland

WEST-CENTRAL REGION (WC)

Atlas Steel
 Beaver Woodfibre
 B. F. Goodrich
 Canadian Oxy Chemical
 Cyanamid
 Dofasco
 Domtar Construction

Thorold
 Niagara
 Fort Erie
 Welland
 Hamilton
 Thorold

Domtar Fine Papers	St. Catherines
Elmira S.T.P.	Elmira
Fraser Inc.	Thorold
General Motors	St. Catherines
Hahn Brass	New Hamburg
Kimberly-Clark of Canada	St. Catherines
Ontario Paper	Thorold
Paris Municipal Treatment Plant	Paris
Penman's Textiles	Paris
Stelco	Hamilton
Stelco	Nanticoke
Stelco	Welland
Texaco	Nanticoke
Uniroyal	Elmira

SECTION 3INDEX II
Industry Grouping by Basic Process TypePulp and Paper

Abitibi Price Inc.	Fort Williams
Abitibi Price Inc.	Iroquois Falls
Abitibi Price Inc.	Sault Ste Marie
Abitibi Price Inc.	Smooth Rock Falls
Abitibi Price Inc.	Thunder Bay
Abitibi Provincial Paper	Port Arthur
American Can of Canada	Marathon
Beaver Wood Fiber Co. Ltd.	Thorold
Boise-Cascade	Fort Frances
Boise-Cascade	Kenora
Canadian International Paper Co. Ltd. (C.I.P.)	Hawkesbury
Domtar Construction	Thorold
Domtar Fine Papers	St. Catherines
Domtar Fine Papers Co. Ltd.	Cornwall
Domtar Packaging Co. Ltd.	Red Rock
Domtar Packaging Co. Ltd.	Trenton
E. B. Eddy Forest Products	Espanola
E. B. Eddy Forest Products	Ottawa
Fraser Inc.	Thorold
Great Lakes Forest Products	Dryden
Great Lakes Forest Products	Thunder Bay
Kimberly-Clark of Canada	Huntsville
Kimberly-Clark of Canada	St. Catherines
MacMillan Bloedel	Sturgeon Falls
Kimberly-Clark of Canada	Terrace Bay
Ontario Paper Co. Ltd.	Thorold
Spruce Falls Power and Paper Co.	Kapuskasing
Strathcona Paper Co. Ltd.	Strathcona
Trent Valley Paperboards	Glen Miller

Basin Iron and Steel

Algoma Steel	Sault Ste Marie
Atlas Steel	Welland
Dofasco (Dominion Foundry and Steel)	Hamilton
Ivaco	L'Orignal
Stelco (Steel Co. of Canada Ltd.)	Hamilton
Stelco	Nanticoke
Stelco	Welland

Mining and Metallurgical

Agnew Lake Mine	Agnew Lake
Agnico Eagle	Glenn Lake
Bulore Mine	Red Lake
Campbell-Red Lake Mine	Red Lake
Canadaka Mines	Elliot Lake
Canadian Smelting and Refining	North Bay
Cobalt Camp	Farr Creek
Deloro Smelting and Refining	Deloro
Denison Mines	Denison Property

Mining and Metallurgical (cont'd)

Denison Mines	Stanrock Property
Dickenson Gold Mines	Balmer Lake
Dome Mines	Timmins
Falconbridge	Emery Creek
Falconbridge	Fecunis Creek
Falconbridge	Moose Lake
Inco	Coniston
Inco	Copper Cliff
Inco	Levack
Inco	Nolin's Creek
Inco	Shebandowan
Kamkotia Mine	Timmins
Kanichee Mine	Temagami
Kerr Addison	Virginiatown
Kidd Creek Mines Ltd.	Porcupine
Madawaska Mines	Bancroft
Noranda Mines	Geco
Pamour Mine	Timmins
Rio Algom Mines	Crotch Lake
Rio Algom Mines	Nordic Property
Rio Algom Mines	Pronto Property
Rio Algom Mines	Quirke Property
Rio Algom Mines	Panel Mine
Schumacher Mine	Timmins
Sherman Mine	North Bay
Teck Corp.	Cart Lake
Willroy Mine	Kirkland Lake
Wilanour Resources	Red Lake

Food Processing

Ault's Foods	Winchester
Canada Starch	Cardinal
Carnation Foods	Alexandria
Corby Distillery	Corbyville
Industrial Grain Products	Thunder Bay
Kraft Foods	Ingleside
Nestle's Foods	Chesterville

Miscellaneous - Automotive

Chrysler of Canada	Windsor
Ford of Canada	St. Thomas
Ford of Canada	Windsor
General Motors	St. Catherines

- Electroplating

Amerock Ltd.	Meaford
Chromasco	Haley Station
Freedland Industries	Kingsville
Hahn Brass	New Hamburg
Haley Industries	Haley Station
Luster Division, National Hardware	Wallaceburg
P. L. Robertson Co. Ltd.	Milton
Windsor Bumper Co.	Windsor

- Textiles

British Cellophane Ltd. (B.C.L.)	Cornwall
Celanese	Cornwall
Celanese	Millhaven
Collie Fabrics	Almonte
Consolidated Textiles	Alexandria
Courtaulds	Cornwall
Eurocurtain	Cornwall
Penman's Textiles	Paris

- Service Industries

Alexandria Municipal Discharge	Alexandria
Cornwall Municipal Discharge	Cornwall
Dussek Brothers	Belleville
Elmira Municipal Discharge	Elmira
Hawkesbury Municipal Discharge	Hawkesbury
Ingersoll S.T.P.	Ingersoll
Iroquois Municipal Discharge	Iroquois
Lindsay S.T.P.	Lindsay
Paris S.T.P.	Paris
Skyway S.T.P.	Burlington
Tricil	Moore Township

- Others

Bakelite Thermosets	Belleville
Consolidated Bathurst	Whitby
Douglas Aircraft	Malton
Holmes Insulation	Sarnia
Ladney Properties	Moore Towsp.
Lacours Lumber	Calstock
Normick Ltd.	Cochrane
Northern Telecom	Ottawa
Northern Wood Preservers	Thunder Bay
Scott Road Dump	Sarnia

Chemical Manufacturing (including organic compounds, inorganic compounds, petrochemicals, polymers, fertilizers and acids)

Alchem Chemical Co. Ltd.	Burlington
Allied Chemical Co. Ltd.	Amherstburg
Ashland Oil	Mississauga
B.A.S.F.	Wyandotte, Michigan
B. F. Goodrich	Niagara
Borg-Warner	Coburg
British Petroleum (BP)	Bronte
Canadian Industries Ltd. (C.I.L.)	Cornwall
Canadian Industries Ltd. (C.I.L.)	Courttright
Canadian Industries Ltd. (C.I.L.)	Parry Sound
Canadian Industries Ltd. (C.I.L.)	Sudbury
Canadian Oxy Chemicals	Fort Erie

Chemical Manufacturing (cont'd)

Chemical Developments of Canada	Longford Mills
Cornwall Chemicals	Cornwall
Cyanamid of Canada	Welland
Domtar Chemicals	Trenton
Dow Badishe	Arnprior
Dow Chemicals	Sarnia
Dupont of Canada	Corunna
Dupont of Canada	Kingston
Dupont of Canada	Maitland
Dupont of Canada	North Bay
Esso Chemical	Sarnia
Ethyl Corp.	Corunna
Fiberglass of Canada	Sarnia
Gulf Oil	Clarkson
Imperial Oil (Refinery)	Sarnia
Monsanto Co. Ltd.	Sarnia
Nitrochem	Maitland
Petrosar	Moore Towsp.
Polysar Corp.	Sarnia
Reichold Chemicals	Thunder Bay
Rohm and Haas	Morrisburg
Shell Canada	Corunna
Shell Canada	Oakville
Suncor	Sarnia
Texaco	Nanticoke
Union Carbide	Lindsay
Uniroyal Co. Ltd.	Elmira
Welland Chemical	Sarnia

SECTION 5INDEX IV
Industries Grouped by WatershedARCTIC BASIN

Abitibi Price Inc.	Iroquois Falls
Abitibi Price Inc.	Smooth Rock Falls
Boise Cascade	Fort Frances
Boise Cascade	Kenora
Bulore Mine	Red Lake
Campbell Red lake Mines	Red Lake
Dickenson Gold Mines	Balmer Lake
Dome Mines	Timmins
Great Lakes Forest Products	Dryden
Kamkotia Mine	Timmins
Kerr Addison Mine	Virginiatown
Normick Ltd.	Cochrane
Pamour Mine	Timmins
Schumacher Mine	Timmins
Spruce Falls Power and Paper Co.	Kapuskasing
Texasgulf	Porcupine River
Wilanour Resources	Red Lake
Willroy Mine	Kirkland Lake

LAKE ERIE BASIN

Allied Chemicals	Amherstburg
B.A.S.F.	Wyandotte, Michigan
Canadian Industries Ltd. (C.I.L.)	Courtright
Chrysler of Canada	Windsor
Dow Chemical	Sarnia
Dupont of Canada	Corunna
Elmira STP	Sarnia
Esso Chemical	Sarnia
Ethyl Corp.	Corunna
Fiberglass of Canada	Sarnia
Ford of Canada	St. Thomas
Ford of Canada	Windsor
Freedland Industries	Kingsville
Hahn Brass	New Hamburg
Holmes Insulation	Sarnia
Imperial Oil	Sarnia
Ingersoll STP	Ingersoll
Monsanto Co. Ltd.	Sarnia
Paris MTP	Paris
Petrosar	Moore Township
Polysar	Sarnia
Scott Road Dump	Sarnia
Shell Canada	Corunna
Stelco	Nanticoke
Suncor	Sarnia

Texaco
Tricil
Uniroyal
Welland Chemical
Windsor Bumper Co.

Nanticoke
Moore Township
Elmira
Sarnia
Windsor

LAKE HURON BASIN

Abitibi Price Inc.
Agnew Lake Mine
Agnico Eagle
Algoma Steel
Amerock Ltd.
Canadian Industries Ltd. (C.I.L.)
Canadian Industries Ltd. (C.I.L.)
Canadian Smelting and Refining
Chemical Development of Canada
Cobalt Camp
Denison Mines
Denison Mines
Dupont of Canada
E.B. Eddy Forest Products
Falconbridge
Falconbridge
Falconbridge
Inco
Inco
Inco
Inco
Kanichee
Kimberly-Clark of Canada
MacMillan Bloedel
Rio Algom
Rio Algom
Rio Algom
Rio Algom
Rio Algom
Sherman Mine

Sault Ste. Marie
Agnew Lake
Glenn Lake
Sault Ste. Marie
Meaford
Parry Sound
Sudbury
North Bay
Longford Mills
Farr Creek
Denison
Stanrock
North Bay
Espanola
Emery Creek
Fecunis Creek
Moose Lake
Coniston
Copper Cliff
Nolin's Creek
Levack
Temagami
Hunstville
Sturgeon Falls
Crotch Lake
Nordic Property
Pronto Property
Quirke Property
Panel Mine
North Bay

LAKE ONTARIO BASIN

Alchem
Atlas Steel
Bakelite Thermosets
Beaver Woodfibre
BF Goodrich
Borg-Warner
British Petroleum (BP)
Canadian Oxy Chemicals
Celanese
Corby Distillery
Cyanamid
Deloro Smelting and Refining
Dofasco
Domtar Chemicals

Burlington
Welland
Belleville
Thorold
Niagara
Coburg
Bronte
Fort Erie
Millhaven
Corbyville
Welland
Deloro
Hamilton
Trenton

Domtar Construction
 Domtar Fine Papers
 Domtar Packaging
 Dussek Brothers
 Fraser Inc.
 General Motors
 Gulf Oil
 Kimberly-Clark of Canada
 Lindsay STP
 Madawaska Mines
 Ontario Paper
 P.L. Robertson
 Shell Canada
 Skyway STP
 Stelco
 Stelco
 Strathcona Paper
 Trent Valley Paper

Thorold
 St. Catherines
 Trenton
 Belleville
 Thorold
 St. Catherines
 Clarkson
 St. Catherines
 Lindsay
 Bancroft
 Thorold
 Milton
 Oakville
 Burlington
 Hamilton
 Welland
 Strathcona
 Glen Miller

LAKE SUPERIOR BASIN

Abitibi Price Inc.
 Abitibi Price Inc.
 Abitibi Provincial
 American Can
 Domtar Packaging
 Great Lakes Forest Products
 Inco
 Industrial Grain Producers
 Kimberly-Clark of Canada
 Noranda Mines
 Northern Wood Preserves
 Reichold Chemicals

Fort William
 Thunder Bay
 Port Arthur
 Marathon
 Red Rock
 Thunder Bay
 Shebandowan
 Thunder Bay
 Terrace Bay
 Geco
 Thunder Bay
 Thunder Bay

OTTAWA RIVER BASIN

Ault's Foods
 Canadian International Paper
 Chromasco
 Collie Fabrics
 Dow Badische
 E.B. Eddy Forest Products
 Haley Industries
 Hawkesbury Municipal Discharge
 Ivaco
 Nestle's Foods

Winchester
 Hawkesbury
 Haley Station
 Almonte
 Arnprior
 Ottawa
 Haley Station
 Hawkesbury
 L'Orignal
 Chesterville

ST. LAWRENCE RIVER BASIN

Alexandria Municipal Discharge
 British Cellophane Ltd. (B.C.L.)
 Canada Starch
 Canadian Industries Ltd. (C.I.L.)
 Carnation Foods
 Celanese

Alexandria
 Cornwall
 Cardinal
 Cornwall
 Alexandria
 Cornwall

Consolidated Textiles	Alexandria
Cornwall Chemicals	Cornwall
Cornwall Municipal Discharge	Cornwall
Courtaulds	Cornwall
Domtar Fine Papers	Cornwall
Dupont	Maitland
Eurocurtain	Cornwall
Iroquois Municipal Discharge	Iroquois
Kraft Foods	Ingleside
Nitrochem	Maitland
Rohm and Haas	Morrisburg

SECTION 6

BIOASSAY DATA SUMMARY SHEETS

The following tables list each Industry and each of their discharges which have been tested by a bioassay. The following information will help the reader understand the tables better:

All tests are assumed to be 96 hour static, aerated bioassays at 15°C, and using rainbow trout (Salmo gairdneri Richardson), unless otherwise stated in the comments sections.

- N.L. means non-lethal at 100%, unless otherwise stated
- pH and conductivity are the parameters for the 100% sample at 15°C.
- sample date is the date the sample was collected, not the date it was tested.
- implant sample indicates a sample taken from a discharge that combines with others before the final industry's discharge.
- LC50 range is the lethal range - the range where no mortality to total mortality was observed, with no partial mortalities.
- The LC50 is the lethal concentration of effluent required to kill 50% of the fish population over a specific period of time (e.g. 96 hours or 4 days).
- the comments section identifies whether any chemical adjustments have been made to the effluent before testing and the availability of other information which might add to the interpretation of the test.

[e] - a final effluent which discharges to an open waterway.

[d] - a discharge which has been discontinued

[p] - a sample taken from an implant stream

[l] - a sample taken from an open waterway (i.e. lake, river, etc.)

[m] - a discharge to municipal sewer

[s] - intake water or service water

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ABITIBI-PRICE - Fort William (NW)	Mill Effluent [e]	08/07/79	grab	79-106	77.5 %	6.1	295	
		08/18/80	4hr comp.	M3-80-50	13 %	4.7		
		08/25/80	4hr grab comp.	M3-80-59	20 %	4.7	250	
		08/28/80	4hr grab comp.	M3-80-65	18 %	4.2	600	
		06/30/81	12hr comp.	M3-81-35	54 %	5.9		
		07/14/81	grab	M3-81-55	49 %	6.1	790	
		08/04/81	grab	M3-81-83	38 %	6.2	920	
		08/10/81	grab	M3-81-92	50 %	6.6		
	Intake [s]	08/07/79	grab	79-108	N.L.	6.9	141	
	Woodroom [e]	08/07/79	grab	79-107	8.3 %	4.7	330	
		08/18/80	4hr comp.	M3-80-51	5 %	4.9		
		25/08/80	4hr grab	M3-80-60	7 %	4.9	225	
		28/08/80	4hr grab comp.	M3-80-66	43 %*	6.0	160	- mill was flushing lagoon with clean water
		06/30/81	12hr comp.	M3-81-36	7 %	4.9		
		07/14/81	grab	M3-81-56	6 %	5.2	1080	
		08/04/81	grab	M3-81-85	11 %	5.4		
		08/10/81	grab	M3-81-93	4.3 %	5.1		
	SCMP [p]	06/30/81	12hr comp.	M3-81-37	14 %	6.9		
		07/13/81	grab	M3-81-57	8 %	7.0	8350	
		08/04/81	grab	M3-81-84	2.2 %	7.2		
		08/10/81	comp.	M3-81-94	6 %	7.2		

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ABITIBI-PRICE -Iroquois Falls (NE)	Final [e]	08/03/76 08/03/76 11/05/80	grab grab grab	M1-76-18 M1-76-18 80-206	42 % 42 % 18 %	6.8 6.8 4.5	240 240 1090	- LC50 range 32-56% - unaerated LC50 range 32-56%
	Blowpit Discharge [p]	08/03/76 08/03/76	grab grab	M1-76-19 M1-76-19	<10 % <10 %	4.7 4.7	2350 2350	- 10% killed all fish in 12 hours - unaerated 10% killed all fish in 12 hours
ABITIBI-PRICE - S.S. Marie (NE)	Main Sewer Effluent [e]	09/13/76 09/13/76 07/11/77 07/11/77 03/09/81	grab grab grab grab grab	M1-76-33 M1-76-33 M1-77-30 M1-77-30 81-24	18 % 24 % 26 % <100 % 14 %	5.1 5.1 6.5 6.5 6.5	325 325 230 230 305	- unaerated - LC50 range 18-32 % - unaerated - 100 % killed all fish in 72 hrs.
ABITIBI-PRICE - Smooth Rock Falls	Foam Lagoon [e] at plant	07/06/76 07/06/76 07/20/76 07/20/76 11/12/80	grab grab grab grab grab	M1-76-13 M1-76-13 M1-76-15 M1-76-15 80-207	20 % 37 % <10 % 11 % 7 %		280 280 2000	- unaerated - unaerated - 10 % killed all fish in 33 hours
	Back Ravine Effluent [d]	07/27/76 07/27/76	grab grab	M1-76-16 M1-76-16	21 % 70 %			- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ABITIBI-PRICE - Sturgeon Falls (NE)	Intake [s]	11/26/79	grab	79-179	N.L.	6.8	50	
	Heavy Solids Sewer [p]	11/26/79	grab	79-183	3.5 %	6.1	950	
	Floatation Clarifier Dis. [e]	08/15/77 11/26/79	grab grab	M1-77-68 79-182	50 % 45 %	6.1 6.0	390 275	- LC50 range 30-65%
	Uncontaminated Sewer [e]	08/15/77 11/26/79	grab grab	M1-77-70 79-180	N.L. N.L.	6.7 7.0	95 65	
	Spent Sulfite liquor to river [e]	08/15/79 11/26/79	grab grab	M1-77-69 79-181	< 3 % 5.4 %	5.5 7.9	8400 8000	
ABITIBI-PRICE - Thunder Bay (NW)	Pulp Mill Effluent [e]	07/25/77 08/12/80 08/26/80 08/29/80 06/15/81 06/15/81 06/15/81	grab 24hr comp. 24hr comp. 24hr comp. 12 hr comp. 12hr comp.	M1-77-50 M3-80-47 M3-80-63 M3-80-68 M3-81-17 M3-81-81	14 % 26 % 22 % 21 % 13% 16%	4.8 6.6 4.3 3.9 4.0 3.3	525 600 510 760 760 760	- LC50 range 10-20% with nets split with M3-81-17 without nets-split with M3-81-17
	Woodroom Effluent [p]	08/02/77	grab	M1-77-55	14 %	4.9	280	- LC50 range 10-20 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ABITIBI PROVINCIAL PAPER								
- Thunder Bay (NW)	Total Mill Effluent [e]	08/02/77	grab	M1-77-54	<10 %	4.6	1150	- 10 % killed all fish in 48 hours
		08/07/79	grab	79-104	>100 %	5.6	180	- 10 % mortality in 100 %
		08/12/80	24hr comp.	M3-80-46	N.L.	6.1	150	
		08/26/80	24hr comp.	M3-89-62	N.L.	6.1	150	
		08/29/80	24hr comp.	M3-80-67	>100 %	6.6	245	- 10 % mortality in 100 %
		06/14/81	2X12hrcomp.	M3-81-18	N.L.	6.4	215	
	Fine Paper Mill Effluent [d]	07/25/77	grab	M1-77-51	14 %	4.0	440	- LC50 range 10-20 %
	Intake [s]	08/07/79	grab	79-105	N.L.	7.4	265	
AGNEW LAKE MINE								
- Elliot Lake (NE)	Tailings Slurry [p]	08/22/79	grab	79-146	N.L.	8.3	2930	- unaerated
	Tailings Pond [e]	06/10/77	grab	M1-77-17	N.L.	7.0	285	- unaerated
		06/10/77	grab	M1-77-17	N.L.	7.0	285	
		08/22/79	grab	79-124	47 %	8.7	2550	- LC50 range 30-73 % - unaerated
		08/22/79	grab	79-124	N.L.*	8.7	2550	- unaerated-diluted with Ministic creek water * at 30 %
	Drainage Ditch (John's Creek) [e]	09/20/76	grab	M1-76-39	N.L.	7.1	118	- unaerated
		06/03/77	grab	M1-77-12	N.L.	7.0	112	- unaerated
		06/10/77	grab	M1-77-16	N.L.	6.6	210	- unaerated
		06/10/77	grab	M1-77-16	N.L.	6.6	210	- unaerated
		08/22/79	grab	79-145	N.L.	7.0	210	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
AGNEW LAKE MINE - Elliot Lake (NE)	Ministic Creek upstream from mine [1]	09/20/76 08/22/79	grab grab	M1-76-38 79-130	N.L. N.L.	7.0 7.0	56 53	- unaerated - unaerated
	Ministic Creek downstream of mine [1]	06/03/77	grab	M1-77-11	N.L.	7.2	61	
AGNICO EAGLE - Glen Lake (NE)	Glen Lake Discharge	07/20/77 07/20/77	grab grab	M1-77-46 M1-77-46	N.L. N.L.	7.8 7.8	300 300	- unaerated
ALCHEM - Burlington (WC)	Stormwater Drainage Sump [e]	06/07/77	grab	77-84	N.L.	8.1	1400	- unaerated
ALEXANDRIA MUNICIPAL DISCHARGE - Alexandria (SE)	Influent [p]	06/25/81	grab	81-86	75 %	7.15	580	
	Manholes of Outfalls of Lagoons 1,2,3 [p]	08/10/77	3 grabs	M1-77-92	N.L.	7.5	700	
	A Cell [p]	06/25/81	grab	81-87	N.L.	7.4	580	
	C Cell [p]	06/25/81	grab	81-88	N.L.	7.6	700	
	D Cell [e]	06/25/81	grab	81-89	N.L.	7.65	590	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ALGOMA STEEL - S.S. Marie (NE)	Terminal Basin [e]	09/07/76	grab	M1-76-28	<10 %	8.5	340	- unaerated-10 % killed all fish in 0.5 hr.
		09/07/76	grab	M1-76-28	<10 %	8.5	340	- 10 % killed all fish in 0.5 hr.
		09/07/76	grab	M1-76-28	2.0 %	8.5	340	- unaerated
		09/07/76	grab	M1-76-28	2.0 %	8.5	340	
		06/06/77	grab	M1-77-14	<5 %	9.2	265	- unaerated 5 % killed all fish in 0.5 hr.
		06/06/77	grab	M1-77-14	<100 %	9.2	265	- 100 % killed all fish in 0.5 hr.
		06/06/77	grab	M1-77-14	1.4 %	9.2	265	- unaerated-LC50 range 1-2 %
		07/24/78	12hr comp.	M2-78-169	2.45 %	7.85	290	- LC50 range 2-3 %
		07/25/78	12hr comp.	M2-78-177	0.88 %	7.03	260	
		07/25/78	12hr comp.	M2-78-184	1.3 %	7.0	200	
		07/26/78	12hr comp.	M2-78-185	1.4 %	7.6	240	- LC50 range 1-2 %
		07/26/78	12hr comp.	M2-78-187	1.3 %	7.7	230	
		07/27/78	12hr comp.	M2-78-188	1.2 %	8.0	210	- LC50 1-1.5 %
		07/27/78	12hr comp.	M2-78-197	1.3 %	8.2	240	
		07/28/78	14.5hr "	M2-78-198	1.18 %	8.0	220	
		07/28/78	grab	M2-78-207	0.93 %	7.65	250	
		07/27/78	grab	M2-78-210	1.17 %	8.35	250	
		07/10/79	24hr comp.	79-74	2.1 %	9.2	315	
		07/11/79	24hr comp.	79-76	2.4 %	9.1	285	- LC50 range 2-3 %
		07/12/79	24hr comp.	79-78	2.37	9.3	305	
		07/13/79	24hr comp.	79-80	3.9 %	8.6	205	- LC50 range 2-5 %
		07/10/79	24hr comp.	M2-79-9	2.2 %	9.3	271	
		02/02/81	grab	81-11	39 %	8.2	170	
		02/03/81	grab	81-19	45 %	8.05	200	
		02/03/81	grab	81-19	45 %	8.05	200	-unaerated
		02/04/81	grab	81-20	25 %			
		02/03/81	grab	81-21	100 %	8.4	235	-preaerated & clino treatd -20 % dead in 100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ALGOMA STEEL								
- S.S. Marie (NE) (Continued)		02/03/81	grab	81-22	87 %	7.8	200	- preaerated
		02/03/81	grab	81-23	71 %	8.6	235	- clino treated
Dorr Thickener [e]	09/13/76	grab		M1-76-35	<10 %	10.7	330	- unaerated 10 % killed all fish in 0.5 hours. pH adjusted to 8.0
		09/13/76	grab	M1-76-35	<10 %	10.7	330	- unaerated 10 % killed all fish in 0.5 hours
		09/13/76	grab	M1-76-35	3.5 %	10.7	330	" " "
		09/13/76	grab	M1-76-34	2.4 %	10.7	330	- unaerated 10 % killed all fish in 0.5 hours pH adjusted
		06/06/77	grab	M1-77-13	N.L.*	9.6	170	- " pH adjusted to 7.0 * at 50 %
		06/06/77	grab	M1-77-13	<100 %	9.6	170	- 100 % killed all fish in 4 hours
		06/06/77	grab	M1-77-13	N.L.*	9.6	170	- unaerated * at 10 %
		07/25/78	24hr comp.	M2-78-178	1.75 %	8.0	380	
		07/26/78	24hr comp.	M2-78-182	2.7 %	8.5	260	
		07/27/78	24hr comp.	M2-78-196	4 %	9.0	250	- LC50 3-5 %
		07/28/78	grab	M2-78-199	3.5 %	9.9	195	
		07/27/78	grab	M2-78-208	7.0 %	10.75	239	- LC50 range 5-10 %
		07/10/79	24hr comp.	N.L.*	8.5	240		- * at 20 %
		07/11/79	24hr comp.	79-75	N.L.*	8.3	250	- * 20 %
		07/13/79	24hr comp.	79-79	N.L.	8.5	230	
		07/13/79	grab	79-81	N.L.	8.7	220	
		07/13/79	grab	79-82	N.L.	8.1	170	
		07/10/79	24hr comp.	M2-79-10	N.L.	8.8	242	
		02/03/81	grab	81-14	4.3 %	7.05	235	
Bar & Strip Mill (pre-lag) [p]		07/24/78	4hr grab comp.	M2-78-163	N.L.	6.5	120	
		07/27/78	grab	M2-78-190	N.L.	7.3	95	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ALGOMA STEEL - S.S. Marie (NE) (Continued)	Bar & Strip Mill (final) [e]	07/24/78 07/25/78 07/27/78 07/28/78 02/03/81	4hr grab grab grab grab grab	M2-78-162 M2-78-171 M2-78-189 M2-78-206 81-10	N.L. N.L. N.L. N.L. 37 %	7.0 7.5 7.0 7.35 9.4	150 180 115 135 130	
	60" Blast Furnace Sewer [e]	07/24/78 07/25/78 07/26/78 07/27/78 07/28/78	comp. of grabs grab grab grab	M2-78-164 M2-78-172 M2-78-180 M2-78-191 M2-78-205	N.L. N.L. N.L. N.L. N.L.	6.7 7.7 6.0 7.5 7.6	110 160 140 95 130	
	30" Blast Furnace Sewer [e]	07/24/78 07/25/78 07/26/78 07/27/78 07/28/78	comp. of grabs grab grab grab	M2-78-165 M2-78-173 M2-78-181 M2-78-192 M2-78-204	N.L. N.L. N.L. N.L. N.L.	6.65 7.6 5.4 7.2 6.85	150 200 200 145 235	
	B.O.F.	07/24/78	grab	M2-78-170	N.L.	8.1	140	
	Cooling Water [e]	07/28/78	grab	M2-78-203	N.L.	7.65	145	
	Coke Plant [p] Coke Quencher Water [p]	02/03/81	grab	81-15	0.7 %	9.4	130	
		02/03/81	grab	81-16	100	9.1	92	-100 % killed 70 % of fish
	Intake [s]	07/25/78 07/26/78 07/25/78 07/28/78	24hr comp. 24hr comp. 24hr comp. 24hr comp.	M2-78-179 M2-78-183 M2-78-195 M2-78-200	N.L. N.L. N.L. N.L.	7.7 7.2 7.9 7.7	140 180 90 130	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ALGOMA STEEL								
- S.S. Marie (NE) (Continued)	Cold Mill Basin [e]	07/24/78	comp.of grabs	M2-78-167	N.L.	7.0	105	
		07/25/78	grab	M2-78-175	N.L.	7.8	160	
		07/27/78	grab	M2-78-193	N.L.	7.6	100	
		07/28/78	grab	M2-78-202	N.L.	7.6	140	
	Cold Mill Basin [e]	09/13/76	grab	M1-76-34	N.L.	6.9	140	- unaerated
		06/06/77	grab	M1-77-15	N.L.	6.9	160	- unaerated
		06/06/77	grab	M1-77-15	N.L.	6.9	165	
	Tube Division [e]	07/24/78	comp. of grabs	M2-78-166	N.L.	6.8	110	
		07/25/78	grab	M2-78-174	N.L.	7.7	160	
		07/26/78	grab	M2-78-186	>100 %	7.4	140	- 40 % mortality in 100 %
	Cold Mill Acid Sewer [e]	07/24/78	comp. of grabs	M2-78-168	35 %	3.5	680	- LC50 range 30-40 %
		07/25/78	grab	M2-78-176	5.2 %	2.2	400	
		07/27/78	grab	M2-78-194	39 %	4.4	360	- LC50 range 30-50 %
		07/27/78	grab	M2-78-209	30.2 %	3.9	850	- LC50 range 20-50 %
		07/28/78	grab	M2-78-201	14.3 %	3.4	940	- LC50 range 10-20 %
	Weak Ammonia Stills (In) [p]	02/03/81	grab	81-17	0.05 %	9.8	18500	
	Weak Ammonia Stills (Out) [p]	02/03/81	grab	81-18	1.7 %	5.7	1300	
ALLIED CHEMICALS								
- Amherstberg (SW)	Main Plant Sewer [e]	03/28/77	grab	77-33	N.L.	8.4	1300	
	North Drainage [e]	03/28/77	grab	77-34	17 %	11.4	41000	- LC50 range 10-30 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
AMERICAN CAN OF CANADA								
- Marathon (NW)	Excess Bleach Plant Filtrate [p]	09/28/78	4hr comp.	78-66	0.55 %	9.7	1750	- pH adjusted to 6.3 - LC50 range 0.3-1 %
	Machine Room Effluent [p]	09/28/78	4hr comp.	78-167	N.L.	9.3	195	- pH adjusted to 6.3
	Effluent to Clarifier [p]	09/28/78	4hr comp.	78-68	22.6 %	10.4	495	- pH adjusted to 6.0
	Caustic Filterate [p]	09/28/78	4hr comp.	78-65	49.9 %	9.1	2200	- pH adjusted to 6.3
	#2 Evaporator Condensate [p]	09/28/78	4hr comp.	78-61	N.L.*	9.5	125	- pH adjusted to 6.3* at 10 %
		09/28/78	4hr comp.	78-61	16.6 %	9.5	125	- pH adjusted to 6.6
	Recovery Furnace Sewer including bark press effluent [p]	09/28/78	4hr comp.	78-75	53.3 %	10	560	- pH adjusted to 6.3
	Barkpress [p]	09/28/78	4hr comp.	78-73	49 %	6.8	125	- pH adjusted to 6.2 - LC50 range 30-80 %
	Recovery Furnace Sewer [p]	09/28/78	4hr comp.	78-74	68 %	11.1	730	- pH adjusted to 6.3 - 33 % mortality in 68 %
	Woodroom Effluent [p]	09/28/78	4hr comp.	78-72	N.L.*	6.9	100	- pH adjusted to 6.2 * at 80 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
AMERICAN CAN OF CANADA								
- Marathon (NW) (Continued)	Combined Mill Effluent [e]	05/09/78 09/28/78 10/14/79 07/15/80 08/12/80 03/25/80 06/16/81 08/18/81 08/24/81	8hr comp. 4hr comp. comp. of grabs 16hr comp. 24hr comp. 4hr grab comp. 12hr comp. 4hr comp. 2.5hr comp.	78-26 78-71 79-161 M3-80-11 M3-80-45 M3-80-64 M3-81-23 M3-81-106 M3-81-114	>100 % 55.6 % 59 % 24 % 82 % 63 % <30 % 45 % 14 %	8.1 5.9 6.2 3.7 7.3 6.2 8.5 6.9 3.2	1050 1400 1300 1300 1200 1500 1700	- 10 % mortality in 100 % - pH adjusted to 6.1 - acid spill in plant -30 % killed all fish in 96 h
	Main Mill Effluent [p]	05/09/78 05/09/78 09/28/78 07/15/80	8hr comp. 8hr comp. 4hr comp. 16hr comp.	78-28 78-28 78-70 M3-80-12	51 % <100 % 63 % 60 %	10.54 10.54 9.9 9.3	1020 1020 1370 1300	- LC50 range 45-65 % - pH adjusted to 7.6 100 % killed all fish in 48 hrs. - pH adjusted to 6.3 - LC50 range 50-80 %
	Effluent from Clarifier [p]	09/28/78	4hr comp.	78-69	63 %	10.4	500	- pH adjusted to 6.3 LC50 range 50 - 80 %
	Acid Bleachery [p]	05/09/78 05/09/78	8hr comp. 8hr comp.	78-27 78-27	25.5 % 35 %	2.55 2.55	1800 1800	- pH adjusted to 7.4
	Caustic Bleacher [p]	05/09/78 05/09/78	8hr comp. 8hr comp.	78-29 78-29	24.5 % 41 %	11.7 11.7	1900 1900	- LC50 range 20-30 % - pH adjusted to 7.8 %
	Main Mill Sump [p]	05/09/78 05/09/78	8hr comp. 8hr comp.	78-30 78-30	41.6 % <100 %	9.82 9.82	470 470	- pH adjusted to 7.7 100 % killed all fish in 24 hrs.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
AMERICAN CAN OF CANADA								
- Marathon (NW) (Continued)	Foul Water from Digester Blow [p]	09/28/78	4hr comp.	78-59	3.2	9.7	270	- LC50 range 2-5 % pH adjusted to 6.3
	#1 Evaporator Condensate [p]	09/28/78	4hr comp.	78-60	3.2 %	10.3	790	- LC50 range 2-5 % pH adjusted to 6.3
	Condensate from Surface Condenser [p]	09/28/78 07/15/80	4hr comp. 16hr comp.	78-62 M3-80-14	1.8 % 7 %	10.5 8.4	1380 150	- pH adjusted to 6.3
	Unbleached White Water [p]	09/28/78	4hr comp.	78-63	8 %	11.6	1110	- pH adjusted to 6.3
	Acid Filtrate [p]	09/28/78 07/15/80	4hr comp. 16hr comp.	78-64 M3-80-13	10 % 3 %	1.9 1.8	3950 3850	- pH adjusted to 6.2
AMEROCK LTD.								
- Meaford (SW)	Final Discharge [e]	05/26/81 05/26/81 06/10/81 06/10/81 06/10/81 06/10/81 06/10/81	grab grab grab grab 4hr comp. 4hr comp. 8hr. comp.	81-50 81-52 81-72 81-73 81.77 81-78 81-79	71 % 66 % 58 % 33 % 55 % 100 % 55 %	10.2 9.9 9.7 10.25 9.65 9.45 9.65	475 440 840 2125 1140 680 900	-no CN process input -with CN process input -no CN process input -with CN process input -no CN process input -with CN process input
	Meaford Storm Sewer [e]	05/26/81 05/26/81 05/26/81 05/26/81 06/10/81 06/10/81	grab grab grab grab grab grab	81-59 81-60 81-61 81-62 81-74 81-75	59 % 30 % 33 % >100 % N.L. 33 %	9.8 9.9 9.9 9.6 9.6 10.15	600 1100 600 1750 870 1480	-no CN process input -clino treated -with CN process input -with CN process input -30% dead in 100% - clino treated -no CN process input -with CN process input

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
AMEROCK LTD. - Meaford (SW) (Continued)	Acid/Alkaline Stream [p]	05/26/81	grab	81-55	1.4 %	7.3	1040	
	Burnishing/Final Neutralized Stream [p]	05/26/81	grab	81-56	0.06 %	11.3	5400	
	Process Water [p]	05/26/81 06/10/81	grab grab	81-58 81-80	>100 % N.L.	8.4 8.35	165 160	-10 % dead in 100 %
ASLAND OIL - Mississauga (C)	Holding Lagoon [m]	06/01/76	grab	76-84	0.01 %			- unaerated
ATLAS STEEL CO. LTD. - Welland (WC)	52" Sewer [d]	09/10/74	grab		N.L.			- unaerated P.Promelas test organism
	42" Sewer [e]	09/30/81 09/30/81	grab 24hr comp.	81-148 81-147	N.L. N.L.	6.2 6.7	335 325	-at Welland R
	36" Sewer [d]	09/10/74	grab		N.L.			- unaerated P.Promelas test organism
	Patterson Ave. Sewer [d]	09/10/74	grab		N.L.			- unaerated P.Promelas test organism
	Intake [s]	09/10/74 09/30/81	grab grab		N.L.			- unaerated P.Promelas test organism
				81-146	N.L	8.3	245	
AULTS - Winchester (SE)	North Lagoon Outfall [e]	09/15/77	grab	M2-77-117	27.5 %	8.4	2150	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
AULTS								
- Winchester (SE) (Continued)	Final Lagoon Outfall [e]	07/06/76	8 grabs	M2-76-20	74 %	8.25	2750	- unaerated LC50 range 56-100 %
		07/07/76	8 grabs	M2-76-21	74 %	8.25	2800	- unaerated LC50 range 56-100 %
		07/08/76	8 grabs	M2-76-22	74 %	8.25	2400	- unaerated LC50 range 56-100 %
		09/28/76	8 grabs	76-164	<50 %	8.35	2500	- unaerated 50 % killed 90 % of all fish in 72 hrs.
		09/28/76	8 grabs	76-164	<100 %	8.35	2500	- 100 % killed all fish in 2 hours
		09/29/76	8 grabs	76-165	<50 %	8.4	2700	- unaerated 50 % killed all fish in 48 hours
		09/29/76	8 grabs	76-165	<100 %	8.4	2700	- 100 % killed all fish in 15 hours
		01/12/77	3 x 8hr comp.	77-2	7.5 %	7.7	2600	- LC50 range 5-10 %
		01/13/77	" "	77-3	7.5 %	7.5	2550	- LC50 range 5-10 %
		01/14/77	" "	77-4	14 %	7.6	2600	- LC50 range 10-20 %
	South Lagoon Outfall [e]	10/17/78	grab	M2-78-282	>100 %	8.0	1800	- unaerated 5 % mortality in 100 %
		10/17/78	grab	M2-78-282	N.L.	8.0	1800	
BAKELITE THERMOSETS								
- Belleville (SE)	West Ditch [e]	07/05/76	grab	M2-76-19	N.L.			
		07/06/77	grab	M2-77-49	N.L.	7.2	220	
	East Ditch [e]	05/03/76	grab	76-58	N.L.	7.9	180	
		07/06/77	grab	M2-77-50	N.L.	9.4	205	

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COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
BASF								
- Wyandotte, Mich. (SW)	South Effluent -Fighting Is. [e]	03/28/77	grab	77-31	7 %	12	46500	- LC50 range 5-10 %
		04/01/80	grab	80-46	40 %	11.9	42000	- pH adjusted to 7.9
		04/01/80	grab	80-45	17 %	11.9	42000	
	North Effluent -Fighting Is. [e]	03/28/77	grab	77-30	6.1 %	11.8	110000	
BEAVER WOOD FIBRE CO. LTD.								
- Thorold (WC)	Final Effluent (at Clarifier) [e]	05/17/76	grab	76-67	60 %	7.7	440	- unaerated
		05/17/76	grab	76-67	60 %	7.7	440	
		04/23/80	grab	80-59	81 %	6.2	420	
		10/07/80	grab	80-195	>100 %	6.8	510	- 40 % mortality in 100 %
	Beaver Dam's Ck (downstream) [1]	04/23/80	grab	80-60	70 %	6.5	415	
	Beaver Dam's Ck (upstream) [1]	04/23/80	grab	80-53	>100 %	7.3	620	- 10 % mortality in 100 %
B.F. GOODRICH								
- Niagara Falls (WC)	Final Effluent (from aerated pond) [e]	03/15/76	grab	76-25	<100 %	9.0	495	- 100 % killed all fish in 49 hours
		09/16/81	24hr comp.	81-130	Nil	6.75	880	
	Settling Pond on Co. Property (South side) [p]	02/23/76	grab	6-6	N.L.	8.5	460	- unaerated
	Intake [s]	09/16/81	grab	81-131	Nil	250	270	
		09/16/81	grab	81-16-81	100 %	7.19		-after clarifier and sand filtration

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
BOISE-CASCADE CANADA LIMITED - Fort Frances (NW)	Final Effluent [e]	07/26/77	grab	M1-77-52	<10 %	6.4	1200	- 10 % killed all fish in 48 hours
		08/13/79	grab	79-116	32 %	7.0	1750	
		07/08/80	grab	M3-80-5	4 %	6.2	1950	
		07/22/80	grab	M3-80-22	9 %	6.8	1650	
		08/06/80	grab	M3-80-38	6 %	6.3	2000	
		07/06/81	grab	M3-81-51	14 %	6.5		
		08/04/81	comp.-grab	M3-81-86	21 %	6.7		
		06/22/81	comp.-grab	M3-81-31	6 %	6.3		
	Intake [s]	08/13/79	grab	79-115	N.L.	7.5	47	
	Clarifier [p]	07/08/80	grab	M3-80-8	11 %	5.7	240	
		07/22/80	grab	M3-80-25	14 %	6.3	430	
		08/06/80	grab	M3-80-41	13 %	5.5	250	
		06/22/81	grab	M3-81-20	8 %	6.0		
		07/06/81	grab	M3-81-52	20 %	6.2		
		08/04/81	grab	M3-81-87	14 %	5.8		
	Aeration Lagoon	07/08/80	grab	M3-80-7	7 %		2500	
	Influent [p]	07/22/80	grab	M3-80-24	5 %	3.5		
		08/06/80	grab	M3-80-39	4 %	3.0	2400	
		07/06/81	grab	M3-81-47	14 %	4.9		
		06/22/81	grab	M3-81-27	15 %	6.5		
	Aeration Lagoon	07/08/80	grab	M3-80-6	3.5 %	6.3	2700	
	Effluent [p]	07/22/80	grab	M3-80-23	8 %	6.7	2550	
		08/22/80	grab	M3-80-40	5 %	6.5	3000	
		06/22/81	grab	M3-81-28	6 %	6.6		
		07/06/81	grab	M3-81-48	16 %	6.6		
		08/04/81	grab	M3-81-88	>45 %	6.8		-45 % dead in 45 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
BOISE-CASCADE CANADA LIMITED								
- Fort Frances (NW) (Continued)	Kraft Mill [p] Bleaching [p]	06/22/81 07/06/81	grab grab	M3-81-24 M3-81-44	7 % 51 %	4.7 6.3		
	Woodroom Clarifier [p]	06/22/81 07/06/81	grab grab	M3-81-25 M3-81-45	7 % 4 %	3.9 4.4		
	Influent to Lagoon system [p]	06/22/81 07/06/81	grab grab	M3-81-26 M3-81-46	19 % 11 %	6.4 6.2		
	Vacuum Pump seals water [p]	06/22/81 07/06/81	grab grab	M3-81-29 M3-81-50	>100 % N.L.	7.1 7.2		- 10% dead in 100%
- Kenora (NW)	White Water Clarifier [p]	11/20/79	grab	79-177	24 %	6.0	425	- LC50 range 18-33 %
		07/15/80	grab	M3-80-16	42 %	6.0	390	
		07/28/80	grab	M3-80-33	39 %	6.4	240	
		08/11/80	grab	M3-80-44	29 %	6.1	240	
		06/15/81	5hr comp.	M3-81-19	18 %	5.2		
		07/06/81	5hr comp.	M3-81-59	14 %	5.6		
		08/17/81	5hr comp.	M3-81-109	8 %	4.6		
	Mg Sulfite [p]	19/11/79 06/15/81 07/13/81 08/17/81	24hr comp. 5hr comp. 5hr comp. 5hr comp.	79-176 M3-81-20 M3-81-60 M3-81-108	3 % 3.6 % 4.0 % 7 %	4.3 4.8 4.2 4.6	1100	- LC50 range 1.8-5 %
	Raw Water [s]	11/20/79	grab	79-175	N.L.	6.9	85	

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COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
BOISE-CASCADE CANADA LIMITED - Kenora (NW) (Continued)	Final Effluent [e]	07/25/77 11/19/79 07/15/80 07/28/80 08/11/80 06/15/81 07/13/81 08/17/81	grab 24hr comp. grab grab grab 5hr comp. 5hr comp. 5hr comp.	M1-77-47 79-178 M3-80-15 M3-80-32 M3-80-43 M3-81-21 M3-81-58 M3-81-110	50 % 16 % 24 % 37 % 36 % 12 % 13 % 11 %	6.1 6.2 4.1 6.3 6.0 4.2 3.9 3.9	310 700 1100 220 210	
BORG WARNER - Coburg (C)	Clarifier [e]	02/16/76	grab	76-1	42 %	7.6	1500	- LC50 range 32-56 % unaerated
BRITISH CELLOPHANE - Cornwall (SE)	Sulfide Sewer (#1 Sewer)[e]	09/10/76 06/27/77 06/27/77 08/16/77 08/16/77 11/29/77 04/24/79	grab grab grab grab grab grab grab	M2-76-37 M2-77-36 M2-77-36 M2-77-96 M2-77-96 M2-77-123 79-16	26% 20% <15% 45% 23% 45% 44.3%	8.75 9.6 9.6 8.9 8.9 8.2 9.2	2000 1900 1900 1950 1950 1250 2100	- unaerated - pH adjusted to 7.0 - 15% killed all fish in 1 hr. - LC50 range 40-50% - pH adjusted to 6.9
	Acid Sewer (#3 Sewer)[e]	08/06/76 06/27/77 06/27/77 04/24/79 04/24/79 09/23/80 09/23/80 10/01/80 10/01/80	grab grab grab grab gran 24hr comp. 24hr comp. 15hr comp. 15hr comp.	M2-76-48 M2-77-38 M2-77-38 79-15 79-15 80-159 80-170 80-176 80-187	4.2% 6.0% >100% 1.3% 8.9% 1.7% 100% 	1.7 1.3 1.3 1.2 1.2 1.8 7.9 1.7 7.6	9300 12000 12000 16000 16000 10,000 15,000 10,000	- unaerated - LC50 range 5-7% - 20% mortality in 100% pH adjusted to 7.0 - LC50 range 0.5-2% - pH adjusted to 7.8 - pH adjusted - pH adjusted

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COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
BRITISH CELLOPHANE								
- Cornwall (SE) (Continued)	#2 Sewer [e]	06/27/77	grab	M2-77-37	N.L.	7.9	1300	
		08/16/77	grab	M2-77-97	N.L.	7.9	1500	
	TCF well [p]	09/23/80	grab	80-168	N.L.	7.4	1900	
		10/01/80	grab	80-185	N.L.	7.6	1900	
BRITISH PETROLEUM (BP)								
- Bronte (C)	Final Holding Pond [e]	06/11/79	grab	79-47	>100 %	8.3		- 15 % mortality in 100 %
		06/11/79	grab	79-47	>100 %*	8.3		- * 24hr test-10 % mortality in 100 %
		04/13/81	grab	81-36	>100 %	7.2	3600	-5 % dead in 100 %
BULORE MINE								
- Red Lake (NW)	Madison Tailings Pond Decant [e]	07/16/79	grab	79-83	N.L.	7.4	480	- unaerated
CAMPBELL RED LAKE MINE								
- Red Lake (NW)	Tailings Pond Decant [e]	07/16/79	grab	79-89	0.21 %	8.9	1700	- LC 50 range 0.1-0.5 % unaerated
		08/18/80	grab	M3-80-55	2 %	8.0		
		06/29/81	grab	M3-81-41	1.4 %	8.3	2575	
		06/29/81	grab	M3-81-41	1.4 %	8.3	2575	-unaerated
		08/10/81	grab	M3-81-98	4.5 %	8.3	2150	
		10/27/81	grab	81-163	1.3 %	8.76	1240	
	Tailings Slurry [p]	06/08/81	grab	M3-81-14	0.14 %	9.3		-unaerated

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COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CANADIAN INDUSTRIES LTD. C.I.L.								
- Cornwall (SE) LEL-2 Sewer [e]								
12/05/79	grab	79-191	N.L.	10.4	2000			
12/05/79	grab	79-191	N.L.	10.4	2000	- pH adjusted to 8.5		
12/06/79	grab	79-192	71 %	3.5	3500			
12/06/79	grab	79-192	N.L.	3.5	3500	pH was adjusted to 6.0		
08/04/81	grab	M2-81-43	N.L.	9.4	1290			
07/14/81	grab	M2-81-21	>100 %	6.2	5500	-20 % dead in 100 %		
CANADIAN INDUSTRIES LTD. C.I.L.								
- Courtright (SW) Intake [s]								
07/12/76	grab	76-129	N.L.	8.2	170	- unaerated		
Effluent Fore- bay in St. Clair River [e]								
07/12/76	grab	6-128	N.L.	7.45	210	- unaerated		
07/26/79	grab	M2-79-23	N.L.	8.5	225			
- Parry Sound (NE) Final Settling Pond [e]								
09/14/76	grab	M1-76-36	>100 %	8.4	260	- unaerated-30 % mortality in 100 %		
08/29/77	grab	M1-77-78	64.4 %	4.5	270	- unaerated		
08/29/77	grab	M1-77-78	>100 %	4.5	270	- 30 % mortality in 100 %		
- Sudbury (NE) Final Effluent [e]								
08/30/77	grab	M1-5-79	36.2 %	9.2	3200	- unaerated		
08/30/77	grab	M1-5-79	<100 %	9.2	3200	- 100 % killed all fish in 1.5 hours.		
CANADIAN INTERNATIONAL PAPER (C.I.P.)								
- Hawkesbury (SE) Sludge Holding Pond [d]								
08/24/77	grab	M2-76-46	13.5 %	3.7	1165	- unaerated LC50 range 10-18 %		
08/11/77	grab	M2-77-95	40 %	5.3	1350			

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COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS	
CANADIAN INTERNATIONAL PAPER (C.I.P.)									
- Hawkesbury (SE) (Continued)	Outfall of Main Lagoon [e]	08/11/77 10/15/80	grab grab	M2-77-94 80-198	18 % 18 %	3.5 3.6	1200 1120		
	Settling Pond [d]	08/24/76	grab	M2-76-45	10.5 %	4.9	320	- unaerated	
Outfall of Main Lagoon [e]									
		10/04/81 10/05/81 10/06/81 10/07/81 10/08/81 10/08/81 07/27/81 12/08/81 12/08/81 12/08/81 12/08/81 12/09/81 12/09/81	grab grab grab grab grab grab grab grab grab grab grab grab grab	81-155 81-156 81-157 81-158 81-159 81-159 M2-81-38 81-179 81-179 81-180 81-180 81-181 81-181	14 % 15 % 10 % 16 % 13 % 9 % 5 % 7 % 6 % 18 % 10 % 10 % 6 %	3.5 3.2 3.3 3.7 3.0 3.0 3.35 3.5 3.5 2.8 2.8 2.85 2.85	1340 1275 1280 1160 1150 1150 1650 1320 1320 1340 1340 1430 1430	- Ottawa R. water used for dilution	
CANADIAN OXY. CHEMICALS									
- Fort Erie (WC)	Process Sewer [e]	09/16/81	24hr comp.	81-133	N.L.	7.75	255		
CANADIAN SMELTING & REFINERY									
- North Bay (NE)	Lagoon [e]	07/20/77 07/20/77	grab grab	M1-77-45 M1-77-45	N.L. N.L.	7.9 7.9	940 940	- unaerated	
CARNATION FOODS									
- Alexandria (SE)	Final [e]	06/25/81	grab	81-90	40 %	6.25	285	-after trickling filter	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CELANESE	- Cornwall (SE) Final Effluent [e]	08/10/76	grab	M2-76-35	N.L.	7.57	280	- unaerated
		07/12/77	grab	M2-77-56	N.L.	7.4	290	
		07/29/81	grab	M2-81-40	N.L.	8.0	387	
	- Millhaven (SE) Sewer Manhole (Central Outfall) [p]	06/07/76	grab	M2-76-1	N.L.	8.0	210	- unaerated
		08/03/76	grab	M2-76-34	N.L.	7.8	270	
		05/31/77	grab	M2-77-6	>100 %	6.9	285	- 10 % mortality in 100 %
	East Ditch (Cooling Water) [e]	06/07/76	grab	M2-76-2	>100 %	8.05	275	- 30 % mortality in 100 % unaerated
		05/30/77	grab	M2-77-7	N.L.	7.7	280	
	West Ditch (Cooling Water) [p]	06/07/76	grab	M2-76-3	>100 %	8.0	270	- 10 % mortality in 100 % unaerated
		05/30/77	grab	M2-77-8	N.L.	7.8	280	
CHEMICAL DEVELOPMENT OF CANADA	- Longford Mills (C) Mix of lagoon and cooling water (shore of L. St.John) [d]	05/03/76	grab	76-56	24 %	7.1		- unaerated LC50 range 18-32 %
		Cooling Water [p]	05/03/76	grab	76-55	N.L.	7.9	110 - unaerated
	Lagoon Discharge [p]	04/20/76	grab	76-50	<10 %	7.75	4075	- unaerated 10 % killed all fish in 15 min.
		04/20/76	grab	76-50	0.70 %	7.75	4075	- unaerated
		05/03/76	grab	76-54	0.6 %	7.4	4075	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CHROMASCO								
- Haley Station (SE)	Final Effl. (40L from West Cr. and 20L of plant effluent) [e]	07/16/76 06/03/77	grab grab	M2-76-26 M2-77-11	N.L. N.L.	8.8 8.7	650 330	- unaerated
	West Ck. Ditch [e]	06/03/77	grab	M2-77-12	38 %	9.4	700	- LC50 range 30-50 %
CHRYSLER CANADA LTD.								
- Windsor (SW)	Final Effluent [e]	03/28/77	grab	77-28	<70 %	8.2	1240	- 70 % killed all fish in 48 hrs.
COBALT CAMP								
- Farr Creek (NE)	Mill Creek Pond [e]	06/29/76	grab	M1-76-11	N.L.	7.2	180	- unaerated
COLLIE FABRICS								
- Almonte (SE)	Main Mill Outfall [m]	09/07/77 06/21/77	grab grab	M2-77-114 M2-77-34	16 % 13 %	5.9 5.7	2800 3350	
	Cooling Water [m]	06/21/77	grab	M2-77-32	N.L.	8.1	165	
	Dye Vat Overflow [m]	06/21/77	grab	M2-77-38	N.L.	8.2	165	
	Drainage Ditch [m]	08/24/76	grab	M2-76-44	<10 %	6.45	610	- 10 % killed all fish in 33hr

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CONSOLIDATED BATHURST								
- Whitby (C)	Print Press Wash [m]	03/17/80 03/17/80 03/17/80 03/17/80 03/17/80 03/17/80 03/17/80	grab grab grab grab grab grab grab	80-36 80-39 80-40 80-41 80-36 80-39 80-40	0.54 % 1.0 % 1.0 % 1.5 % 0.8 % 17 % 5.4 %	8.0	700	- unaerated - Treatment #1 - unaerated - Treatment #2 - unaerated - Treatment #3 - unaerated
	Pure Red Dye [m]	03/17/80	grab	80-36	35ppm			- unaerated
	Pure Yellow [m]	03/17/80	grab	80-38	260ppm			- unaerated
CONSOLIDATED TEXTILES								
- Alexandria (SE)	Combined Final [e]	04/24/79 04/24/79 06/25/81	grab grab grab	79-17 79-17 81-91	1.6 % 3.3 % 30 %	6.0 6.0 7.05	740 740 495	- LC50 range 0.5-5 % - unaerated
CORBY'S DISTILLERY								
- Corbyville (SE)	Manhole by River [e]	05/30/77 06/09/77 06/09/77	grab grab grab	M2-77-2 M2-77-15 M2-77-15	N.L. N.L. >100 %	6.8 8.3 8.3	240 270 270	- unaerated 10 % mortality in 100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CORNWALL CHEMICALS - Cornwall (SE)	Manhole #26 [p]	12/06/79	grab	79-193	N.L.	8.7	1950	
	Combined Effluent [e]	08/10/76	grab	M2-76-38	<10 %			- unaerated - 10 % killed all fish in 33 hrs.
		08/10/76	grab	M2-76-38	7.5 %			- unaerated
		07/23/76	grab	M2-76-28	24 %	7.9	4100	- unaerated
		08/10/76	grab	M2-76-36	43 %	9.1	3425	- unaerated
		06/28/77	grab	M2-77-43	N.L.	6.6	1400	
		12/05/79	grab	79-189	87 %	3.8	5500	
		12/05/79	grab	79-189	N.L.	3.8	5500	- pH adjusted to 6.1
		12/06/79	grab	79-190	71 %	3.2	1650	
		12/06/79	grab	79-190	N.L.	3.2	1650	- pH adjusted to 6.1
CORNWALL MUNICIPAL DISCHARGE - Cornwall (SE)	Manhole in front of chlorination building [e]	08/10/77	grab	M2-77-91	83 %	6.7	1000	- LC50 range 70-100 %
	Influent [p]	06/25/81	grab	81-84	N.L.	7.15	800	
COURTAULDS - Cornwall (SE)	Effluent [e]	06/25/81	grab	81-85	N.L.	7.15	810	-after chlorination
	Viscose (#5 Sewer) [e]	08/27/76	grab	M2-76-50	14 %	11.65	1800	- unaerated LC50 range 10-18 %
		06/27/77	grab	M2-77-39	5.0 %	13.2	8800	
		06/27/77	grab	M2-77-39	4.2 %	13.2	8800	- pH adjusted to 7.0
		08/16/77	grab	M2-77-100	16 %	11.8	2400	- LC50 range 10-25 %
		08/16/77	grab	M2-77-100	8.5 %	11.8	2400	- pH adjusted to 6.9
		11/30/77	grab	M2-77-126	4.9 %	11.8	2800	
		04/24/79	grab	79-13	N.L.*	12.1	2600	- * at 2 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
COURTAULDS								
- Cornwall (SE) (Continued)		04/24/79	grab	79-13	3.5 %	12.1	2600	- LC50 range 2-5 % pH adjusted to 7.8
		04/24/79	grab	79-13	3.5 %	12.1	2600	- "
		09/23/80	24hr comp.	80-161	13 %	11.9	2570	
		09/23/80	24hr comp.	80-172	N.L.	7.3	1800	- pH adjusted
		10/01/80	24hr comp.	80-178	14 %	11.9	2600	
		10/01/80	24hr comp.	80-189	49 %	7.8	1650	- pH adjusted
		07/30/81	grab	M2-81-42	13 %	11.9	4650	
		07/08/81	grab	M2-81-18	2 %	12.5	10900	
Alkaline (Sulphide) Sewer #4 [e]		03/09/76	grab	79-15	2.6 %	9.5	1850	- unaerated
		08/16/77	grab	M2-77-99	14 %	11.0	3200	
		08/16/77	grab	M2-77-99	31 %	11.0	3200	- pH adjusted
		11/30/77	grab	M2-77-125	N.L.	8.7	1500	
		04/24/79	grab	79-14	N.L.	7.3	2050	
		09/23/80	24hr comp.	80-160	15 %	10.4	2500	
		09/23/80	24hr comp.	80-171	39 %	8.2	2450	- pH adjusted
		10/01/80	24hr comp.	80-177	2 %	10.6	2350	
		10/01/80	24hr comp.	80-188	4 %	7.9	2400	- pH adjusted
		07/08/81	grab	M2-81-19	6 %	9.8	3100	
		07/21/81	24hr comp.	M2-81-29	38 %	11.5	2600	
		07/21/81	grab	M2-81-30	92 %	9.38	4280	-when effluent turned milky
		07/22/81	24hr comp.	M2-81-31	68 %	9.7	1950	
		07/23/81	24hr comp.	M2-81-32	37 %	10.4	2400	
		07/23/81	24hr comp.	81-113	32 %	10.75	2000	-split with M2-81-32
		07/24/81	24hr comp.	M2-81-33	95 %	9.8	2075	
		07/25/81	24hr comp.	M2-81-35	41 %	10.5	3050	
		07/26/81	24hr comp.	M2-81-36	7 %	11.8	7300	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
COURTAULDS								
- Cornwall (SE) (Continued)	Acid Sewer #6 [e]	03/09/76	grab	76-14	2.3 %	1.8	11600	- unaerated
		08/27/76	grab	76-49	<1.0 %		1800	- " 70 % mortality in 1 %
		06/27/77	grab	M2-77-40	1.4 %	1.2	12000	
		06/27/77	grab	M2-77-40	1.7 %	1.2	12000	- pH adjusted to 7.0
		08/16/77	grab	M2-77-101	1.4 %	1.9	13200	
		08/16/77	grab	M2-77-101	0.85 %	1.9	13400	
		08/16/77	grab	M2-77-101	1.0 %	1.9	13400	- pH adjusted
		08/16/77	grab	M2-77-101	1.2 %	1.9	13400	- renewed static
		08/16/77	grab	M2-77-101	1.0 %	1.9	13400	- diluted with St. Lawrence River water
		08/16/77	grab	M2-77-101	1.5 %	1.9	13400	- diluted with St. Lawrence R. water - pH adjusted
		08/16/77	grab	M2-77-105	3.5 %	1.9	13400	- H ₂ S treated
		08/16/77	grab	M2-77-107	0.25	1.9	13400	- precipitate from H ₂ S treated
		08/16/77	grab	M2-77-101	0.56 %	1.9	13400	- stored 13 days @ 50°C
		08/16/77	grab	M2-77-101	0.59 %	1.9	13400	- stored 13 days @ 200C
		08/16/77	grab	M2-77-101	0.9 %	1.9	13400	- stored 21 days @ 50C
		08/16/77	grab	M2-77-101	1.05 %	1.9	13400	- stored 21 days @ 200C
		08/16/77	grab	M2-77-101	1.15 %	1.9	13400	- stored 28 days @ 50C
		08/16/77	grab	M2-77-101	1.2 %	1.9	13400	- stored 28 days @ 200C
		11/29/77	grab	M2-77-124	2.1 %	1.8	16000	
		11/30/77	grab	M2-77-127	2.2 %			
		04/24/79	grab	79-12	1.4 %	1.5	22000	- LC50 range 0.5-2.0 %
		04/24/79	grab	79-12	<2 %	1.5	22000	- pH adjusted to 7.8 - 2 % killed 90 % of the fish in 96 hrs.
		10/01/80	24hr comp.	80-179	4 %	1.7	16000	
		10/01/80	24hr comp.	80-190	5 %	7.3	10500	- pH adjusted
		09/23/80	24hr comp.	80-162	0.1 %	1.6	19500	
		09/23/80	24hr comp.	80-173	0.8 %	7.0	14400	- pH adjusted

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
COURTAULDS								
- Cornwall (SE) (Continued)	Acid Sewer #6	06/17/81	24hr comp.	81-82	2.2 %	1.2	19500	-split with M2-81-1
		06/17/81	24hr comp.	M2-81-1	1.7 %	1.8	20500	
		06/18/81	24hr comp.	M2-81-2	1.3 %			
		06/19/81	24hr comp.	M2-81-3	1.4 %	1.9	16500	
		06/20/81	24hr comp.	M2-81-4	1.1 %	1.8	20000	
		06/22/81	24hr comp.	M2-81-6	1.1 %	1.8	24500	
		06/22/81	24hr comp.	82-83	1.5 %	1.4	20500	-split with M2-81-6
		06/23/81	24hr comp.	M2-81-7	1.1 %	1.8	21600	
		06/24/81	24hr comp.	M2-81-8	1.1 %	1.6	25000	
		06/25/81	24hr comp.	M2-81-9	0.9 %	1.9	22000	
		06/26/81	24hr comp.	M2-81-10	1.0 %	1.7	23000	
		06/27/81	24hr comp.	M2-81-11	2.0 %	1.7	20500	
		06/21/81	24hr comp.	M2-81-5	1.1 %	1.8	22000	
		06/28/81	24hr comp.	M2-81-12	1.6 %	1.9	19600	
		06/29/81	24hr comp.	M2-81-13	1.4 %	1.8	20900	
		06/30/81	24hr comp.	M2-81-14	2.0 %	1.6	21500	
		06/30/81	24hr comp.	81-104	1.0 %	1.55	21000	
		07/01/81	24hr comp.	M2-81-15	1.6 %	1.8	17800	
		07/02/81	24hr comp.	M2-81-16	1.9 %	1.7	18500	
		07/03/81	24hr comp.	M2-81-17	1.6 %	1.7	20500	
	#7 Acid Recovery [e]	07/13/81	grab	M2-81-25	>100 %	7.6	620	-10 % dead in 100 %
	Process Cleanup Sewer #13 [e]	03/09/76	grab	76-13	32 %	10.15	490	- unaerated
		06/27/77	grab	77-41	89 %	11.1	800	
		08/16/77	grab	77-102	N.L.	7.5	740	
		09/23/80	22hr comp.	80-165	N.L.	7.3	680	
		10/01/80	23hr comp.	80-182	84 %	10.2	580	
	#7 Acid Recovery (manhole in front of plant parking lot) [e]	08/16/77	grab	M2-77-98	N.L.	7.6	3200	
		09/23/80	grab	M2-77-98	N.L.	8.1	305	
		10/01/80	grab	80-180	N.L.	7.9	265	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
COURTAULDS - Cornwall (SE) (Continued)	50/50: Acid Sewer/#5 Viscose Sewer [e]	08/27/76	grab	M2-76-50A	1.7 %	1.75	7800	- unaerated
	#14 Tankcar Unloading [e]	09/23/80 10/01/80	grab grab	80-166 80-183	N.L. N.L.	7.3 7.3	295 310	
	#15 Sewer (Cooling Water) [e]	09/23/80 10/01/80	grab grab	80-167 80-164	N.L. N.L.	7.5 7.5	1650 1850	
	Pumphouse (St. Lawrence River) [s]	09/23/80 10/01/80	grab grab	80-169 80-186	N.L. N.L.	8.1 8.2	240 255	
CYANAMID OF CANADA - Welland (WC)	Thompson's Creek at Garner Rd. [1]	08/27/74			10.8 %			- fathead minnows (<i>P. promelas</i>) used - unaerated
		08/19/74			1.8 %			- "
		08/11/75			22 %			- "
		03/15/76	grab	76-20	21 %	8.0	1520	- unaerated
		03/29/76	grab	76-30	4.5 %			- unaerated
		03/13/79	grab	79-9	6 %	9.5	1000	- LC50 range 2-10 %
		03/13/79	grab	79-9	9.4 %	9.5	1000	- pH adjusted to 7.4
		03/13/79	grab	79-9	100 %	9.5	1000	- pH adjusted to 7.8 - 1st run Dowex ammonia removed.
		03/13/79	grab	79-9	75 %	9.5	1000	- pH adjusted to 7.6 - 2nd run Dowex ammonia removed. LC50 range 50-100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CYANAMID OF CANADA - Welland (WC) (Continued)	36" Sewer [e]	08/27/74			2.85 %			- unaerated - fathead minnows (P.promelas) used. - "
		08/19/74			1.3 %			- LC50 range 1-1.8 %
		08/11/75			5.6 %			- unaerated - fathead minnows (P.promelas) used.
		08/11/75			7.5 %			- unaerated - fathead minnows (P.promelas) used. LC50 range 5.6-10 %
		08/11/75			>7.5 %			- unaerated - fathead minnows (P. promelas) used 7.5%, killed 30% of fishs in 96 hrs.
		/75			4 %			- continuous flow
		03/15/76	grab	CF-6 76-22	2.2 %	9.4	3300	- unaerated
		03/29/76	grab	76-35	<0.75 %			- unaerated 0.75 % killed all fish in 1.5 hrs.
		03/13/79	grab	79-8	0.75	10	3000	- LC50 range 0.5-1 %
		03/13/79	grab	79-8	3 %	10	3000	- LC50 range 1-5 % - pH adjusted to 7.8
		03/13/79	grab	79-8	N.L.	10	3000	- pH adjusted to 7.6 - 1 st run of Dowex ammonia removed
		03/13/79	grab	79-8	50 %	10	3000	- pH adjusted to 7.5 - 2nd run of Dowex ammonia removed.
		06/23/80	grab	80-94	21 %	9.2	495	
Welland R. 60-70 yds. downstream of 36" Sewer [1]	03/15/76	grab	76-21	<100 %	9.2	345		- unaerated - 100 % killed all fish in 1 hr.
	03/29/76	grab	76-36	<100 %				- unaerated - 100 % killed all fish in 0.5 hr.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
CYANAMID OF CANADA								
- Welland (WC) (Continued)	Welland R. at Moya Road Bridge upstream of Cyanamid [1]	03/15/76 03/29/76 06/23/80	grab grab grab	76-24 76-33 80-100	N.L. N.L. N.L.	7.9 8.6	270 310	- unaerated - unaerated
	Thompson Cr. - downstream [1]	03/29/76 03/29/76 06/23/80	grab grab grab	76-32 76-31 80-98	<100 % 13.5 % 12 %	8.6	90	- unaerated 100 % killed all fish in 0.5 hr. - unaerated
	18" Amanol Sewer to Thompson Creek [e]	03/29/76 06/23/80	grab grab	76-29 80-95	<1.0 % 14 %	8.9	900	- unaerated 1 % killed all fish in 1.5 hr.
	Dicyandiamide Sewer [e]	06/23/80	grab	(-PROMPT-)	8.7 %	8.5	880	
	Thompson Creek (at Chippewa Creek Bridge) [1]	06/23/80	grab	80-99	100 %	8.6	1000	
	Thompson Creek at Thorold Townline Rd. [1]	03/13/79 03/29/76 06/23/80	grab grab grab	79-11 76-28 80-97	N.L. N.L. N.L.	8.3 7.5	220 440	- unaerated
	Intake [s]	08/27/74 08/11/75 03/15/76			N.L. N.L.			- unaerated - fathead minnows (P.promelas) used "
		03/29/76 03/13/79 06/23/80	grab grab grab	76-23 76-34 79-10 80-101	>100 % N.L. N.L. N.L.	8.0 7.5 8.7	275 210 295	- 10 % mortality - 100 % - unaerated - unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DELORO SMELTING & REFINING								
- Deloro (SE)	Final Effluent [e]	06/14/76 05/27/77	grab grab	M2-76-6 M2-77-1	56 % 70 %	2.9 4.7	1210 940	- unaerated - LC50 range 50-100 %
	Moira River [1] at Malone Bridge	06/14/76 05/27/77	grab grab	M2-76-7 M2-77-2	N.L. N.L.	8.0 7.7	215 210	- unaerated
	Moira River at Hwy. 17 [1]	06/14/78 05/27/78	grab grab	M2-76-8 M2-77-3	N.L. N.L.	8.25 7.8	215 190	
DENISON MINE								
- Denison Property (NE)	Dunlop Lake Intake (D-10) [s]	06/20/79 08/22/79	grab grab	79-66 79-140	N.L. N.L.	6.0 6.3	340 360	- unaerated - unaerated
	Stollery Lake outflow (D-05) [e]	08/23/76 07/20/77 07/20/77	grab grab grab	M1-76-24 M1-77-40 M1-77-40	75 % 56 % <100 %	8.1 8.0 8.0	2800 3200 3200	- unaerated LC50 range 50-100 % - unaerated - 100 % killed all fish in 33hrs.
		06/20/79 08/22/79 06/10/80 06/10/80 08/20/80 08/20/80 08/20/80	grab grab grab grab grab grab grab	79-65 79-133 80-90 80-93 80-137 >100 % 80-140	N.L. N.L. 61 % N.L. 20 % 7.8 <100 %	6.7 7.5 8.7 8.6 10.0 7.8 10.1	240 2000 2925 3500 3100 3250 3300	- unaerated - unaerated - clinoptilolite treated - clinoptilolite treated - pH adjusted 30 % mortality in 100 % - clinoptilolite treated 100 % killed all fish in 24 hrs.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DENISON MINE								
- Denison Property (Continued)	Tailings Effl. after Barium treatment at Dam 8 (D-02) [p]	06/20/79 06/20/79 08/22/79	grab grab grab	79-64 79-64 79-138	56 % <70 % 84 %	8.7 8.7 8.2	2700 2700 2650	- unaerated LC50 range 30-100 % - unaerated - 70 % killed all fish in 72 hrs. - unaerated - LC50 range 70-100 %
	(DS-04) Feed to Barium treatment plant (DS-02) [p]	08/22/79 06/20/79 06/20/79	grab grab grab	79-142 79-68 79-68	N.L. >10 % N.L.*	7.7 1.2 1.2	1500 9500 9500	- unaerated - unaerated-10 % mortality in 10 % - pH adjusted to 7.8 - pH adjusted to 7.8 * at 50 %
	Tailings Effl. after 1st stage settling (DS-01) [p]	06/20/79 08/22/79 08/22/79	grab grab grab	79-67 79-141 79-141	N.L. <100 % N.L.	8.2 5.4 5.4	500 1700 1700	- unaerated - unaerated - 100 % killed all fish in 48 hrs. - unaerated - pH adjusted to 8.4
	New Dam overflow [e]	08/16/76 08/16/76 06/20/77 06/20/77	grab grab grab grab	M1-76-22 M1-76-22 M1-77-23 M1-77-23	<10 % N.L. N.L. 100 %	2.7 2.7 2.4 5.6	2500 2500 2400 2000	- unaerated - 10 % killed all fish in 4 hrs. - pH adjusted to 7.2 - pH adjusted to 7.1 unaerated
DICKENSON GOLD MINES								
- Balmer Lake (NW)	Dickenson Tailings Pond [p]	08/16/78 08/16/78 07/16/79	grab grab grab	78-50 78-50 79-86	<1 % 0.66 % 2.2 %	10.1 10.1 8.3	850 850 740	- 1 % killed all fish in 24 hrs. - unaerated LC50 range 1-5 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DICKENSON GOLD MINES								
- Balmer Lake (NW) (Continued)	Balmer Cr. near Chukuni River [1]	08/15/78 07/16/79	grab grab	78-45 79-87	N.L. >100 %	7.0 7.4	250 425	- unaerated - 10 % mortality in 100 %
Balmer Creek downstream of Balmer Lake [e]								
		06/08/81	grab	M3-81-15	<100 %	7.6		- 100 % killed all fish in 24 hours
		06/29/81 08/10/81	grab grab	M3-81-43 M3-81-101	58 >100 %	7.6 7.2	660 610	- 40% dead in 100%
Tailings pond decant (at Dam #2 [e])								
		06/08/81 06/29/81 06/29/81 08/10/81	grab grab grab grab	M3-81-16 M3-81-42 M3-81-42 M3-81-99	N.L.* N.L. N.L. N.L.	8.0 7.6 7.6 8.0	387 387 530	- *at 40 % - unaerated
Mine Water [p]								
		08/10/81	grab	M3-81-100	N.L.	7.6	3200	
Chukuni R. upstream of Balmer Creek [1] 08/15/78								
			grab	78-46	N.L.	7.9	46	
Chukuni River down- stream of Balmer Creek [1] 08/15/78								
			grab	78-47	N.L.	8.0	50	
Balmer Lake downstream of Balmer [1] 08/16/78								
			grab	78-48	N.L.	7.2	75	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DICKENSON GOLD MINES - Balmer Lake (NW)	Balmer Creek down- stream of Balmer L. [1]	08/16/78 08/18/80	grab grab	78-49 M3-80-56	N.L. >100 %	7.1 7.5	500	- 10 % mortality in 100 %
	Tailings Pond Decant [1]	08/18/80	grab	M3-80-54	7 %	6.7		
DOFASCO - Hamilton (WC)	Blast Furnace cooling water with Stretford liquid [p]	10/03/77 10/03/77	grab grab	76-116 76-116	>100 % N.L.*	8.0	530	- 30 % mortality in 100 % - * 48 hr. LC50 at 50 %
	Stretford Liquor [p]	10/03/77	grab	76-117	0.09	9.1	90000	
	Lagoon overflow with Stretford liquor [p]	08/05/75 10/03/77 10/03/77	grab grab grab		N.L.			- fathead minnow used (P. Pomelus)
	Blast Furnace [e] cooling water sewer	03/13/78 03/13/78	grab grab	78-9 78-9	<30 % 24 %	7.4 7.8	650 600	- * 24hr. - * 24hr.
	Bay front cooling water sewer	03/13/78 03/13/78	grab grab	78-10 78-10	38 %* N.L.	8.0 8.0	600 465	* 72 hr LC50
	[e]							

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOFASCO								
- Hamilton (WC) (Continued)	Intake [s]	03/13/78	grab	78-11	N.L.*	7.8	445	- * 24 hr.
		08/09/78	grab	M2-78-213	N.L.	7.8	520	
		08/10/78	grab	M2-78-216	N.L.	7.83	500	
		08/11/78	grab	M2-78-220	N.L.	7.9	490	
		08/15/78	grab	M2-78-224	N.L.	8.0	540	
		08/16/78	grab	M2-78-228	N.L.	8.2	490	
		08/17/78	grab	M2-78-231	N.L.	8.0	480	
		08/22/78	grab	M2-78-234	N.L.	7.1	440	
		08/23/78	grab	M2-78-239	N.L.	7.9	490	
		08/24/78	grab	M2-78-242	N.L.	8.2	495	
		08/29/78	24hr comp.	M2-78-248	N.L.	8.0	480	
		08/30/78	24hr comp.	M2-78-252	N.L.	8.5	480	
		08/31/78	24hr comp.	M2-78-256	N.L.	7.8	490	
		09/06/78	24hr comp.	M2-78-258	N.L.	8.5	490	
		09/07/78	24hr comp.	M2-78-262	N.L.	7.3	490	
		09/08/78	24hr comp.	M2-78-266	N.L.	7.5	400	
		09/12/78	24hr comp.	M2-78-272	N.L.	8.0	410	
		09/13/78	24hr comp.	M2-78-276	N.L.	7.7	554	
	Turbo Blower [e]	08/10/78	grab	M2-78-217	N.L.	8.25	50	
		08/11/78	grab	M2-78-221	N.L.	8.2	100	
		09/12/78	grab	M2-78-274	77 %	9.2	75	
		09/13/78	grab	M2-78-279	N.L.	8.0	510	
		09/14/78	grab	M2-78-280	N.L.	8.3	500	
Coke Plant (oven) & Melt Shop [e]	08/05/75	grab			N.L.			- P. Promelas used - unaerated - 100 % killed all fish in 4 hrs. - unaerated - unaerated - continuous flow - unaerated - 56 % killed all fish in 72 hrs.
	08/05/75	grab			<100 %			
	08/05/75				68.2 %			
	08/05/75				50 %			
	08/05/75				38 %			
	03/10/76	grab		76-61	<56 %	7.7	540	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOFASCO								
- Hamilton (WC)		03/10/76	grab	76-62	<10 %	8.2	1410	- unaerated - 10 % killed all fish in 2 hrs. with ammonium thiocyanate
(Continued)		03/10/76	grab	76-62	4.2 %	8.2	1410	- unaerated - with ammonium thiocyanate
		03/13/78	grab	78-8	N.L.*	7.9	480	- * at 50 %
		03/13/78	grab	78-8	N.L.	7.9	480	
		08/09/78	grab	M2-78-212	N.L.	7.4	400	
		08/10/78	grab	M2-78-215	N.L.	7.45	610	
		08/11/78	grab	M2-78-219	N.L.	7.8	540	
		08/15/78	grab	M2-78-223	N.L.	7.3	590	
		08/16/78	grab	M2-78-227	N.L.	7.45	540	
		08/17/78	grab	M2-78-230	N.L.	7.3	590	
		08/22/78	grab	M2-78-233	N.L.	7.3	620	
		08/23/78	grab	M2-78-238	100 %	7.5	700	
		08/29/78	24hr comp.	M2-78-241	N.L.	7.5	600	
		08/30/78	24hr comp.	M2-78-247	N.L.	7.1	580	
		08/31/78	24hr comp.	M2-78-255	N.L.	7.1	600	
		09/07/78	24hr comp.	M2-78-264	N.L.	7.3	480	
		09/08/78	24hr comp.	M2-78-268	N.L.	8.0	490	
		09/12/78	24hr comp.	M2-78-275	N.L.	8.0	470	
		09/13/78	24hr comp.	M2-78-278	N.L.	7.2	560	
Silicon Plant [e]		08/24/78	grab	M2-78-226	89 %	9.7	370	- white coloured effluent
		08/24/78	grab	M2-78-245	90 %	9.55	430	- green coloured effluent
		08/30/78	grab	M2-78-253	24 %	10.8	480	- LC50 range 15-40 %
		09/06/78	grab	M2-78-260	>100 %	10.0	325	- 20 % mortality in 100 %
		09/07/78	grab	M2-78-265	>100 %	9.5	390	- 30 % mortality in 100 %
		09/08/78	grab	M2-78-269	78 %	9.5	380	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOFASCO								
- Hamilton (WC) (Continued)	Boiler House [e]	08/17/78	grab	M2-78-225	N.L.	9.1	630	
		08/23/78	grab	M2-78-235	N.L.	7.5	520	
		08/24/78	grab	M2-78-243	N.L.	8.0	500	
		08/29/78	grab	M2-78-249	N.L.	8.0	490	
	Ottawa Street Sewer (slip) [e]	07/10/69	grab	69-36	77.5 %			- unaerated, red belly dace used (C. eos)
		08/05/75	grab		N.L.			- fathead minnows used (P. promelas)
		05/10/76	grab	76-63	50 %	7.2	355	- unaerated
		08/09/78	grab	M2-78-211	N.L.	8.4	560	
		08/10/78	grab	M2-78-214	N.L.	8.7	510	
		08/11/78	grab	M2-78-218	N.L.	8.3	500	
		08/15/78	grab	M2-78-222	N.L.	8.6	510	
		08/16/78	grab	M2-78-226	N.L.	8.5	470	
		08/22/78	grab	M2-78-232	N.L.	8.3	500	
		08/23/78	grab	M2-78-229	78 %	8.4	500	- LC50 range 60-100 %
		08/24/78	grab	M2-78-240	N.L.	8.5	500	
		08/29/78	24hr comp.	M2-78-246	100 %	8.5	500	
		08/30/78	24hr comp.	M2-78-251	N.L.	7.5	500	
		08/31/78	24hr comp.	M2-78-254	N.L.	8.0	500	
		08/06/78	24hr comp.	M2-78-259	N.L.	8.0	500	
		09/07/78	24hr comp.	M2-78-263	N.L.	8.0	520	
		09/08/78	24hr comp.	M2-78-267	N.L.	8.0	490	
		09/12/78	24hr comp.	M2-78-273	N.L.	8.5	450	
		09/13/78	24hr comp.	M2-78-247	N.L.	8.2	550	
DOME MINE								
- Timmins (NE)	Tailings Pond Decant [e]	10/28/80	grab	80-202	4 %	8.7	770	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOMTAR CHEMICALS - Trenton (SE)	Outlet for Oilskimmer [e]	07/06/77	grab	M2-77-45	70 %	6.5	235	- LC50 range 50-100 %
	South Ditch [e]	07/06/77	grab	M2-77-44	N.L.	6.7	570	
DOMTAR CONSTRUCTION - Thorold (WC)	Final [e]	04/23/80	grab	80-57	<30 %*	7.3	310	- * 100 % mortality after 48 hrs.
		12/09/80	grab	80-210	14 %	7.0	335	
DOMTAR FINE PAPERS LTD. - Cornwall (SE)	Discharge of	07/23/76	grab	M2-76-29	76 %	6.5	950	- unaerated - LC50 range 56-100 %
	Clarifier [e]	06/28/77	grab	M2-77-42	94 %	6.4	1400	
		10/15/80	grab	80-199	77 %	9.8	580	
		07/14/81	grab	M2-81-23	59 %	7.6	1040	
DOMTAR FINE PAPERS - St. Catherines (WC)	Final [e]	04/23/80	grab	80-54	<30 %*	7.4	375	- * 90% mortality in 96 hrs.
		10/07/80	grab	80-196	90 %	7.1	438	
		12/01/81	grab	81-174	N.L.	7.69	425	
DOMTAR PACKAGING LTD. - Red Rock (NW)	Final [e]	06/16/75			28 %			- steam stripper not in operation - unaerated
		06/24/75			49 %	7.3	195	- unaerated
		07/07/75			25 %			- unaerated, continuous flow
		07/14/75			22 %			- " " "
		08/02/77	grab	M1-77-53	N.L.	6.5	495	
		09/13/77	grab	M1-77-90	>100 %	8.7	380	- 30% mortality in 100% at 24hr.
		09/13/77	grab	M1-77-90	<65 %			- 95% mortality in 65% at 96 hrs.
		07/07/80	grab comp.	M3-80-1	22 %	7.7	750	
		07/22/80	4hr grab comp.	M3-80-18	30 %	8.8		

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOMTAR PACKAGING LTD.								
- Red Rock (NW)		07/30/80	4hr grab comp.	M3-80-27	30 %	9.9	800	
(Continued)		08/25/80	4hr grab comp.	M3-80-61	N.L.	7.3		- Lock Lomand dilution water used
		08/25/80	4hr grab comp.	M3-80-61	100 %	7.3		- Domatar Research well water used
		10/20/80	4hr grab	80-200	30 %	8.6	510	
		03/09/81	grab	81-25	60 %	6.85	475	
		03/09/81	grab	81-25	61 %	6.85	475	-diluted with mill water
		08/12/81	4hr comp.	M3-81-102	39 %	7.9		
		08/18/81	comp.	M3/81/107	>100 %	6.8		-20 % dead in 100 % woodroom down
		08/25/81	3hr comp.	M3-81-113	62 %	8.3		
		08/12/81	4hr comp.	81-126	50 %	7.45	570	-split with Me-81-113
Uncontaminated stream [p]		07/07/80	2.5hr grab comp.	M3-80-2	N.L.	7.6	150	
		07/22/80	4hr grab comp.	M3-80-19	70 %	7.3	195	
Clarifier Outfall [p]		07/07/80	2.5hr grab comp.	M3-80-3	37 %	6.8	470	
		07/22/80	4hr grab	M3-80-20	34 %	6.9	550	
Low suspended solids stream [p]		07/07/80	2.5hr grab comp.	M3-80-4	30 %	9.7	1470	
		07/22/80	4hr grab comp.	M3-80-21	30 %	10.5	1300	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOMTAR PACKAGING LTD. Combined sample [e]								
- Trenton (SE)		11/17/81	grab	81-170	38 %	7.69	1040	
	Process Effluent & Vacuum Seals [e]	05/03/76	grab	76-57	17 %	7.1	355	
		05/03/76	grab	76-57	< 3.2 %	7.1	355	- unaerated - 3.2 % killed all fish in 48 hrs.
		09/13/76	grab	M2-76-58	4.2 %	7.35	2300	- unaerated
		09/13/76	grab	M2-76-58	13.5 %	7.35	2300	LC50 range 3.2-5.6 % - LC50 range 10-18 %
	Process Effluent (White Water) [e]	08/23/76	grab	M2-76-42	7.6 %			
		08/23/76	grab	M2-76-43	< 5.6 %			- unaerated - 5.6 % killed all fish in 48 hrs.
		06/13/77	grab	M2-77-16	24 %	7.5	2200	- LC50 range 20-30 %
		07/26/77	grab	M2-77-63	28 %	7.7	1320	- LC50 range 20-40 %
		07/26/77	grab	M2-77-65	33 %	8.5	6600	
		03/22/78	grab	M2-78-7	7.2 %	7.4	7100	
		05/02/78	grab	M2-78-14	2.3 %	8.5	9500	
		05/26/80	grab	80-75	6 %	7.0	5000	
	Economizer Pad Drainage [e]	09/13/76	grab	M2-76-59	N.L.	6.9	35	- unaerated
		06/13/77	grab	M2-77-17	N.L.	7.9	240	- unaerated
		03/22/78	grab	M2-78-2	N.L.	7.4	260	
	Vacuum Pump Seals Over- flow [e]	05/02/78	grab	M2-79-9	24 %	8.5	2950	
		05/26/80	grab	80-72	7 %	7.0	2500	- O ₂ levels were far too low at the end of the test - sample had a very high BOD ₅
	Sulphite Liquor [e]	03/08/76	grab	76-17	< 0.75 %	7.25	350	- unaerated - 0.75 % killed all fish in 44 hrs.
		03/08/76	grab	76-17	6.6 %	7.5	350	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOMTAR PACKAGING LTD.								
- Trenton (SE) (Continued)	Vacuum Pump Seal [e]	06/13/77 07/26/77 03/27/78 05/02/78 03/26/80	grab grab grab grab grab	M2-77-22 M2-77-66 M2-78-6 M2-78-13 80-73	14 % 13 % N.L. 52 % N.L.*	8.1 7.8 7.3 7.9 7.4	940 2700 430 730 320	- LC50 range 10-20 % * at 65 %
	Digester [e] Drains	09/13/76 06/13/77 07/26/77 03/22/78 05/02/78 05/26/80	grab grab grab grab grab	M2-76-61 M2-77-67 M2-77-19 M2-78-3 M2-78-10 80-74	<100 % N.L. N.L. N.L. N.L. >100 %	8.95 9.0 7.0 9.3 9.7 7.2	855 320 190 630 500 620	- unaerated - 100 % killed all fish in 12 hrs. - 10 % mortality in 100 %
	Economizer Effluent [e]	09/13/76 06/13/77 07/26/77 03/22/78 05/02/78 05/26/80	grab grab grab grab grab grab	M2-76-60 M2-77-18 M2-77-70 M2-78-1 M2-78-8 80-69	N.L. N.L. N.L. N.L. N.L. N.L.	7.5 7.8 6.2 7.7 7.4 7.7	190 220 190 750 220 190	
	Cooling Water [e]	09/13/76 06/13/77 07/26/77 03/22/78 05/02/78 05/26/80	grab grab grab grab grab grab	M2-76-63 M2-77-21 M2-77-64 M2-78-4 M2-78-11 80-71	N.L. N.L. N.L. N.L. N.L. >100 %	7.8 7.5 8.5 8.1 7.4 8.1	190 230 270 365 220 195	- unaerated - unaerated - 20 % mortality in 100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOMTAR PACKAGING LTD.								
- Trenton (SE) (Continue)	Combined Sample [e]	06/13/77	a series of grabs	lab sample	47 %	8.3	820	
		07/26/77	"	M2-77-69	76 %	8.8	690	
		03/22/78	"	lab sample	39 %	7.7	1470	- LC50 range 30-50 %
		05/02/78	"	lab sample	25 %	8.6	1575	
		05/26/80	"	80-76	<30 %	7.5	1035	- lower concentrations had very low O ₂ levels. - 70 % mortality in 30 % after 96hrs.
	Boiler House [e]	06/13/76	grab	M2-76-42	<100 %	11.05	625	- 100 % killed all fish in 1.5 hr.
		06/13/77	grab	M2-77-20	44 %	11.3	640	- LC50 range 30-65 %
		06/13/77	grab	M2-77-22	N.L.*	11.3	640	- pH adjusted to 7.0 * at 65 %
		07/26/77	grab	M2-77-68	56 %	10.8	580	
		07/26/77	grab	M2-77-68	N.L.	10.8	580	- pH adjusted to 6.7
		03/22/78	grab	M2-78-5	28 %	11.1	910	- LC50 range 20-40 %
		05/02/78	grab	M2-78-12	40 %	12.2	940	
		05/26/80	grab	80-68	56 %	10.6	880	
	Economizer [e] Zero	05/26/80	grab	80-70	>100 %	7.8	190	- 10 % mortality in 100 %
DOW CHEMICAL								
- Sarnia (SW)	Disposal Site in Scott Rd. Dump [e]	07/28/81	grab	81-115	61 %	7.57	4150	
DOW BADISCHE								
- Arnprior (SE)	Storm Sewer Manhole [e]	07/30/76	grab	M2-76-31	N.L.	7.5	130	- unaerated
		06/03/77	grab	M2-77-13	N.L.	7.4	135	- unaerated
	Process Sewer Manhole [m]	07/30/76	grab	M2-76-33	80 %	6.6	135	- unaerated
		06/03/77	grab	M2-77-14	N.L.	7.9	140	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOUGLAS AIRCRAFT - Malton (C)	Final Effluent [m]	06/02/75	grab		N.L.			- unaerated
DOW CHEMICAL - Sarnia (SW)	3rd Street Sewer [e]	03/03/76 06/21/76 05/10/77 05/31/77 06/21/77 07/12/77 07/11/78	grab grab grab grab grab grab grab	76-9 76-109 77-53 77-67 77-89 77-101 78-35	N.L. N.L. N.L. N.L. N.L. N.L. >100 %	8.6 8.9 8.2 9.0 8.1 7.7 8.0	260 290 180 300 200 430 210	- unaerated - unaerated - unaerated - unaerated, 20% mortality in 100%
		07/11/78 09/13/78 09/13/78 06/21/79 07/19/79 08/16/79	grab grab grab 24hr comp. " " " "	78-35 78-57 78-57 M2-79-3 M2-79-13 M2-79-34	N.L. N.L. N.L. N.L. 88 % >100 %	8.0 7.7 7.7 6.5 7.5 8.2	210 210 210 245 253 200	- unaerated - unaerated - 10 % mortality in 100 %
	54" Sewer (1st Sluice) [e]	06/21/76 07/19/76 05/10/77 05/31/77 06/21/77 07/12/77 07/11/78 07/11/78	grab grab grab grab grab grab grab grab	76-106 76-137 77-54 77-66 77-88 77-100 78-34 78-34	86 % >100 % N.L. N.L. N.L. N.L. N.L. N.L.	7.55 8.7 9.4 8.1 8.4 7.6 7.8 7.8	380 300 1240 820 220 910 280 280	- unaerated - 10 % mortality in 100 % - unaerated
		09/13/78 09/13/78	grab grab	78-56 78-56	<100 % >100 %	10.2 10.2	780 780	- 60 % mortality in 100 % - 40 % mortality in 100 % unaerated
		06/21/79 07/19/79 08/16/79	24hr comp. " " " "	M2-79-1 M2-79-11 M2-79-32	N.L. N.L. N.L.	8.4 8.6 8.5	364 975 610	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOW CHEMICAL - Sarnia (SW) (Continued)	Acid Drain [e]	03/02/76	grab	76-10	36 %	11.1	2900	- unaerated
		06/21/76	grab	76-105	8.6 %	12.0	6600	- unaerated
		06/21/76	grab	76-105	>100 %	12.0	66000	- unaerated LC50 range 5.6 - 13.6 % 10 % mortality in 100 % pH adjusted to 7.2
	42" Sewer [e]	06/21/79	24hr comp.	M2-79-2	11 %	12.2	8590	
		06/21/79	" "	M2-79-2	88 %	12.2	8590	- pH adjusted to 6.2
		07/19/79	" "	M2-79-12	N.L.	12.1	13000	
		08/16/79	" "	M2-79-33	32 %	10.4	2870	
		08/16/79	" "	M2-79-33	N.L.	10.4	2870	- pH adjusted to 7.1
		06/21/76	grab	76-103	>100 %	8.25	235	- unaerated, 20 % mortality 100 %
		10/18/76	grab	76-174	N.L.			- unaerated
		10/18/76	grab	76-174	>100 %			- 10 % mortality in 100 %
	Intake [s]	10/18/76	grab	76-173	N.L.			- unaerated
		10/18/76	grab	76-173	N.L.			
D.O.E.O. [e]		06/28/76	grab	76-111	N.L.	8.25	175	- unaerated
		10/18/76	grab	76-178	N.L.			- unaerated
		10/18/76	grab	76-178	>100 %			- 20 % mortality in 100 %
Steam Plant [e]		06/28/76	grab	76-110	N.L.	8.1	175	- unaerated
		10/18/76	grab	76-179	>100 %			- unaerated
		10/18/76	grab	76-179	N.L.			10 % mortality in 100 %
4th Street Sewer [e]		06/21/76	grab	76-107	N.L.	8.2	2500	- unaerated
		10/18/76	grab	76-177	N.L.			- unaerated
		10/18/76	grab	76-177	>100 %			- 10 % mortality in 100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DOW CHEMICAL - Sarnia (SW) (Continued)	2nd Street Sewer [e]	06/21/76 10/18/76 10/18/76	grab grab grab	76-108 76-176 76-176	N.L. >100 % >100 %	9.8	170	- unaerated - unaerated 20 % mortality in 100 % - 10 % mortality in 100 %
	48" Sewer [e]	06/21/76 10/18/76	grab grab	76-104 76-175	N.L. >100 %	8.7	180	- unaerated - unaerated 10 % mortality in 100 %
	Disposal site in Scott Road Dump [e]	07/26/79	grab	M2-79-21	N.L.	7.9	8810	
DUPONT OF CANADA - Corunna (SW)	Final Effluent [e]	07/21/76 07/24/79	grab grab	M2-79-15	N.L. N.L.	8.1	265	- unaerated
- Kingston (SE)	Final Plant Effluent [m]	06/16/77 06/16/77	grab grab	M2-77-27 M2-77-27	N.L. N.L.	8.8 8.8	280 280	- unaerated
- Maitland (SE)	Total Process Effluent [p]	03/09/76 08/16/76	grab grab	76-16 M2-76-41	38 % 42 %	7.05 8.25	600 415	- unaerated - unaerated LC50 range 32-56 %
	Total Process Effluent [e]	06/30/81	grab	81-102	N.L.	7.41	520	
	Mixing Chamber before discharge to river [e]	06/16/77 08/08/77	grab grab	M2-77-24 M2-77-89	81 % N.L.	9.5 7.8	1100 320	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
DUPONT OF CANADA - Maitland (SE) (Continued)	Sanitary Sewer (Manhole after Chlorin- ation Plant) [p]	06/16/77 06/16/77 06/30/81	grab grab grab	M2-77-23 M2-77-23 81-99	<100 % <100 % >100 %	7.7 7.7 7.24	660 660 650	- unaerated - 100 % killed all fish in 0.5 hrs. - unaerated - 100 % killed -10 % dead in 100 %
	Main Plant [p] (before mixing with T.E.L. plant discharge)	08/08/77 06/30/81 08/08/77	grab grab grab	M2-77-88 81-100 M2-77-87	N.L. N.L. N.L.	7.6 7.46 8.81900	280 395	-crib ditch
	T.E.L. Plant [p] (before mixing with main plant) Service Water [s]	06/30/81 06/30/81	grab grab	81-101 81-103	>100 % N.L.	8.85 8.19	1850 275	-30 %dead in 100 %
- North Bay (NE)	Final Effluent [e]	09/20/76 07/11/77 07/11/77	grab grab grab	M1-76-44 M1-77-34 M1-77-34	N.L. N.L. N.L.	7.4 7.3 7.3	155 365 365	- unaerated
DUSSEK BROTHERS - Belleville (SE)	Surface Runoff collection ditch [e]	07/19/76 08/16/76	grab grab	M2-76-27 M2-76-42	16 % 13.5 %	8.0 7.7	255 280	- unaerated - unaerated LC50 range 10-18 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
E.B. EDDY FOREST PRODUCTS LTD. - Espanola (NE)	#1 Bleach Plant [p]	03/07/77	grab	77-16	13 %	2.8	2000	
		03/30/77	grab	77-38	14 %	2.6	1700	- LC50 range 10-20 %
		05/11/77	grab	77-59	14 %	2.3	2800	- LC50 range 10-20 %
		05/30/77	grab	M1-9-77	<10 %	2.8	1650	- unaerated - 10 % killed all fish in 4 hrs.
		05/30/77	grab	M1-9-77	<65 %	2.8	1650	- 65 % killed all fish in 0.5 hrs.
		06/21/77	grab	M1-77-27	14 %	3.6	1020	- LC50 range 10-20 %
		08/08/77	grab	M1-77-61	N.L.*	6.8	350	- * at 10 %
		08/23/77	grab	M1-77-72	7.1 %	3.0	1300	- LC50 range 5-10 %
		09/13/77	grab	M1-77-84	N.L.*	3.4	710	- * 24hr - LC50 at 10 %
		04/24/78	grab	78-19	24 %			- LC50 range 20-30 %
		04/24/78	grab	78-19	37 %			- pH adjusted
		07/30/79	grab	79-97	13 %	2.3	1320	- LC50 range 10-28 %
		07/30/79	grab	79-97	28 %	2.3	1320	- pH adjusted to 6.3
	#2 Bleach Plant [p]	03/07/77	grab	77-17	8.2 %	2.8	3600	
		03/30/77	grab	77-37	14 %	6.3	2900	- LC50 range 10-20 %
		05/11/77	grab	77-60	23.7 %	5.1	3400	
		05/30/77	grab	M1-10-77	<10 %	2.8	4000	- unaerated - 10 % killed all fish in 3 hrs.
		05/30/77	grab	M1-10-77	<65 %	2.8	4000	- 65 % killed all fish in 0.5 hrs.
		06/21/77	grab	M1-77-29	<2 %	1.8	8000	- 2 % killed all fish in 4 hr
		08/08/77	grab	M1-77-62	N.L.*	6.2	410	- * at 10 %
		08/23/77	grab	M1-77-73	7.1 %	3.8	3300	- LC50 range 5-10 %
		09/13/77	grab	M1-77-85	N.L.*	7.0	4000	- * 24hr - LC50 at 10 %
		04/24/78	grab	78-20	14 %	3.6	3200	- LC50 range 10-20 %
		04/24/78	grab	78-20	4.7 %	3.6	3200	- unaerated
		04/24/78	grab	78-20	<30 %	3.6	3200	- pH adjusted to 7.7 - 30 % killed all fish in 48 hrs.
		04/24/78	grab	78-20	<10 %	3.6	3200	- pH adjusted to 7.7 - 10 % killed all fish in 96 hrs.
		07/30/79	grab	79-98	37.5 %	6.5	3600	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
E.B. EDDY FOREST PRODUCTS LTD. - Espanola (NE) (Continued)	Intake [s]	03/07/77	grab	77-19	N.L.	6.3	140	
		03/30/77	grab	77-39	N.L.	6.4	170	
		05/11/77	grab	77-58	N.L.	6.8	65	
		05/30/77	grab	M1-8-77	N.L.	7.2	62	- unaerated
		05/30/77	grab	M1-8-77	N.L.	7.2	62	
		06/21/77	grab	M1-77-27	N.L.	7.2	120	
		08/09/77	grab	M1-77-64	N.L.	6.6	92	
		08/23/77	grab	M1-77-75	N.L.	6.9	62	
		09/13/77	grab	M1-77-87	N.L.*	6.6	100	- * 72 hr
		04/24/78	grab	78-23	N.L.	7.5	210	
		11/10/81	grab	81-168	N.L.	7.6	170	
		04/24/78	grab	78-23	N.L.	7.5	210	- unaerated
		07/30/79	grab	79-100	N.L.	7.2	600	
		07/29/80	grab	80-121	N.L.	7.2	72	
		08/26/80	grab	80-146	N.L.	7.3	74	
		11/10/81	gran	81-168	N.L.	7.6	170	
	Final Effluent (Outfall Pond or Whole Mill) [e]	05/31/76	grab	M1-76-2	7.5 %	3.2	1500	-LC50 range 5.6-10% unaerated
		05/31/76	gram	M1-76-2	24 %	3.2	1500	-LC50 range 18-32% unaerated pH adjusted to 6.9
		03/07/77	grab	77-18	19 %	3.1	1600	
		03/30/77	grab	77-36	84.3 %	6.4	1000	
		05/11/77	grab	77-61	35.4 %	4.4	1000	
		05/30/77	grab	M1-7-77	14 %	7.1	1225	-unaerated LC50 range 10-20%
		05/30/77	grab	M1-7-77	<65 %	7.1	1225	-65% killed all fish in
		06/21/77	grab	M1-77-26	17 %	6.0	1000	12 hrs.
		08/08/77	grab	M1-77-63	>10 %	9.3	890	- 10 % mortality is 10 %
		08/23/77	grab	M1-77-74	12 %	7.4	1300	
		09/13/77	grab	M1-77-86	23 %*	6.7	1200	- from foam pond 24 hr LC50
		04/24/78	grab	78-18	44 %	6.8	1250	- LC50 range 30-65 %
		04/24/78	grab	78-18	12 %	6.8	1250	- unaerated
		04/24/78	grab	78-18	>45 %			- 20 % mortality in 45 %
		07/30/79	grab	79-95	60 %	6.3	940	
		07/29/80	grab	80-122	100 %	6.8	710	- only hardwood operation was functioning
		08/26/80	grab	80-145	35 %	7.7	980	
		11/10/81	grab	81-166	35	7.2	1650	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
E.B. EDDY FOREST PRODUCTS LTD. - Espanola (NE) (Continued)	Woodroom [e]	05/31/76	grab	M1-76-3	12 %	4.8	175	- unaerated
		05/31/76	grab	M1-76-3	12 %	4.8	175	- unaerated pH adjusted
		04/24/78	grab	78-22	11 %	4.7	180	to 7.0
		07/30/79	grab	79-101	4.2 %	4.3	210	
		07/30/79	grab	79-101	<10 %	4.3	210	- pH adjusted to 7.1 - 10% killed all fish in 24 hrs.
		07/29/80	grab	80-123	4 %	4.7	365	
		07/29/80	grab	80-123	2.2 %	4.7	365	- stored for 1 week
		07/29/80	grab	80-124	5.8 %	6.9		- treated
		11/10/81	grab	81-167	6.7	4.3	365	
		Main Sewer [p]	grab	79-96	42 %	5.7	1200	- LC50 range 32-56 %
- Ottawa (SE)	Kraft Mill [p]	07/30/79	grab	79-96	42 %	10.7	355	- LC50 range 32-56 %
		07/20/77	grab	M2-77-28	<50 %	7.7	150	- 50 % killed all fish in 72 hrs.
		07/20/77	grab	M2-77-28	65 %	7.7	150	
		08/04/77	grab	M2-77-75	N.L.	6.2	115	
		08/04/77	grab	M2-77-76	N.L.	6.0	110	
		08/04/77	grab	M2-77-77	N.L.	6.0	110	
		08/04/77	grab	M2-77-78	N.L.	6.9	110	
		08/04/77	6-gr.comb.	M2-77-83	N.L.	7.2	110	
		09/07/77	grab	M2-77-110	100 %	4.8	190	
		10/14/80	grab	80-197	86 %	9.0	200	- clarifier being by-passed
Board Mill Sewer [d]	Board Mill Sewer [d]	07/20/77	grab	M2-77-29	80 %	7.2	160	- LC50 range 65-100 %
		08/04/77	grab	M2-77-79	N.L.	5.7	135	
		08/04/77	grab	M2-77-80	90 %	5.0	160	- LC50 range 80-100 %
		08/04/77	grab	M2-77-81	N.L.	5.2	125	
		08/04/77	grab	M2-77-82	N.L.	5.6	165	
		08/04/77	6-gr.comb.	M2-77-84	N.L.	6.0	150	
		09/07/77	grab	M2-77-111	N.L.	5.5	170	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
E.B. EDDY FOREST PRODUCTS LTD. - Ottawa (SE) (Continued)	Speciality Mill (before clarifier) [p]	08/04/77 08/04/77 08/04/77 08/04/77 09/07/77	grab grab grab grab grab	M2-77-71 M2-77-72 M2-77-73 M2-77-74 M2-77-109	N.L. N.L. 90 % N.L. N.L.	6.4 5.6 4.8 5.6 5.9	105 105 105 160 190	
ELMIRA SEWAGE TREATMENT PLANT - Elmira (WC)	Final Effluent (before chlorination) [p]	09/20/76 07/14/81	grab grab	76-157 81-111	N.L. 54 %	7.5 7.58	3000 5800	
	Effluent [e]	09/20/76 04/12/77	grab grab	76-158 77-43	38 % 59 %	7.4 7.6	3500 5500	- LC50 range 30-50 % - LC50 range 50-70 %
	Influent (mixture of Elmira sewage & Uniroyal effluent) [p]	04/12/77	grab	77-42	58 %	7.6	4600	- LC50 range 50-70 %
	Influent [p]	07/14/81	grab	81-110	40 %	7.84	6000	
ESSO CHEMICAL OF CANADA LTD. - Sarnia (SW)	Pressure Sewer (Anthracite filter influent)[p]	06/28/76 4/19/77 05/11/77 05/31/77 07/12/77	grab grab grab grab grab	76-112 77-46 77-50 77-63 77-97	<100 % N.L. >100 % < 70 % 72 %	8.1 7.8 8.8 7.3 7.9	250 470 370 400 260	- unaerated - 100 % killed all fish in 24 hrs - 30 % mortality in 100 % - 70 % killed all fish in 48 hrs - LC50 range 50-100 %
	Final effluent [e]	07/25/79 08/02/79 08/22/79 07/30/80 09/29/80	grab grab grab grab grab	M2-79-16 M2-79-31 M2-79-41 M2-80-9 M2-80-19	N.L. >100 % 56 % N.L. 100 %	7.9 7.3 7.9 -	280 345 275	- 48 hr - 10% mortality in 100%

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
Pressure Sewer (Anthracite filter) [p]	04/13/76	grab	76-49	51 %	7.8	240	- unaerated	
	06/28/76	grab	76-113	< 75 %	8.2	275	- 75 % killed all fish in 48 hrs - unaerated	
	07/19/76	grab	76-141	93 %	7.3	330	- unaerated	
	10/25/76	grab	76-185	N.L.	7.2	2200		
	10/25/76	grab	76-185	N.L.	7.2	2200	-unaerated	
	04/18/77	grab	77-47	N.L.	8.0	450		
	05/10/77	grab	77-51	97 %	8.8	390		
	05/31/77	grab	77-64	< 70 %	7.9	440	- 70 % killed all fish in 33 hrs	
	06/21/77	grab	77-87	N.L.	7.5	520		
	07/12/77	grab	77-98	N.L.	8.0	265		
ETHYL CORPORATION - Corunna (SW)	Final Effluent [e]	07/11/78	grab	78-32	< 70 %	7.9	200	- unaerated - 70% killed all fish in 96 hrs
		07/11/78	grab	78-32	< 100 %	7.9	200	- 100 % killed all fish in 96 hrs
		07/12/76	grab	76-126	N.L.	7.6	1550	- unaerated
		05/10/77	grab	77-55	N.L.	7.5	1800	
		07/11/78	grab	78-36	N.L.	7.7	300	- unaerated
		07/11/77	grab	78-36	N.L.	7.7	300	
		08/22/78	grab	78-51	N.L.	8.2	1440	
		08/22/78	grab	78-51	N.L.	8.2	1440	- unaerated
		08/22/78	grab	78-51	N.L.	8.2	1440	- unaerated - sample agitated at 150C for 24 hrs. prior to testing
		09/12/78	grab	78-58	N.L.	7.2	1580	
		09/12/78	grab	78-58	N.L.	7.2	1580	- unaerated
		07/31/79	grab	M2-79-25	23 %	10.6	1900	
		10/25/79	grab	79-162	N.L.	9.2	1500	
		03/05/80	grab	80-34	50 %	8.8	2500	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ETHYL CORPORATION - Corunna (SW) (Continued)		06/18/80 06/24/80 07/21/80 07/28/80 09/ /80	grab grab grab grab grab	M2-80-3 M2-80-4 M2-80-8 M2-80-9 M2-80-20	100 % 100 % 90 % N.L. N.L.			
	Intake [s]	07/12/76	grab	76-127	N.L.	8.3	210	- unaerated
EUROCURTAIN -Cornwall (SE)	Dye Separator Effluent [e]	02/19/79 02/19/79 03/05/79 03/05/79 04/23/79	grab grab grab grab grab	79-6 79-6 79-7 79-7 79-18	15 % 15 % N.L.* N.L.* 25 %	6.0 6.0 6.4 6.4 6.4	390 390 330 330 325	-ph adjusted to 7.8 -*at 40 % -*at 40 % ph adjusted
FALCONBRIDGE - Emery Creek (NE) - Fecunis Lake (NE) - Moose Lake (NE)	Emery Creek (below bridge) [1] Fecunis Lake [e] Moose Creek Effluent [e] Moose Lake (below treatment plant) [p]	07/14/77 07/14/77 08/15/77 08/15/77 08/15/77 09/08/76	grab grab grab grab grab grab	M1-77-39 M1-77-39 M1-77-67 M1-77-67 M1-77-65 M1-76-30	N.L. N.L. 32 % <100 % 13 % N.L.	7.6 7.6 5.0 5.0 4.5 7.0	420 420 980 980 1100 920	- unaerated - unaerated - unaerated - 100 % killed all fish in 72 hrs. - unaerated - 100 % killed all fish in 96 hrs. - unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
FIBERGLASS OF CANADA - Sarnia (SW)	Moose Lake	06/14/76	grab	M1-76-7	N.L.	6.6	975	
		09/08/76	grab	M1-76-31	>100 %	7.0	810	- unaerated 20 % mortality in 100 %
		08/15/77	grab	M1-77-66	>100 %	7.5	780	- unaerated 20 % mortality in 100 %
		08/15/77	grab	M1-77-66	>100 %	7.5	780	- 10 % mortality in 100 %
	Final Effluent [e]	07/19/76	grab	76-134	N.L.	7.5	195	- unaerated
	Treatment Sump	07/19/76	grab	76-136	17.5 %	7.35	13000	- unaerated - LC50 range 10-30 %
	(Scott Road Dump) [e]	07/26/79	grab	M2-79-18	7 %	7.9	11000	
		10/29/79	grab	79-164	7 %	7.8	14000	
FORD MOTOR CO. - St. Thomas (SW)	Scott Road Dump (before treatment) [e]	10/29/79	grab	79-163	2.2 %	8.7	12000	
	Influent to impounding basin (inplant sample) [p]	12/12/78	grab	78-80	N.L.	7.4	460	
	Combined Effluent at Dodd's Cr. [e]	12/12/78	grab	78-81	N.L.	7.3	435	
	East Settling Lagoon [p]	12/12/78	grab	78-82	52 %	7.0	750	- LC50 range 45-60 %
- Windsor (SW)	Riverside Dr. pumping station [e]	03/28/77	grab	77-26	<70 %	7.3	430	- 70 % killed 70 % of fish in 48 hrs.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
FRASER INC. - Thorold (WC)	Clarifier Decant [e]	02/28/77	grab	77.13	39 %	7.8	620	
		02/28/77	grab	77.13	≤ 50 %	7.8	620	-dechlorinated - 50 % killed all fish in 96 hrs.
		04/23/80	grab	80-56	37 %	7.7	520	
		12/01/81	grab	81-175	N.L.	8.34	660	
FREEDLAND INDUSTRIES - Kingsville (SW)	Final Effluent	08/18/75	grab		75 %	10.7		
GENERAL MOTORS - St. Catharines (WC)	Creek leading from plant on east side [e]	02/23/76	grab	76-5	N.L.	7.4	470	- unaerated
GREAT LAKES FOREST PRODUCTS LTD. (Formerly Reed Pulp & Paper Co.) - Dryden (NW)	Final [e]	08/04/77	grab	M1-77-57	21 %	9.6	450	
		07/28/80	grab	M3-80-34	1.3 %	8.4		
		08/12/80	grab	M3-80-42	24 %	10.3	1000	
		08/19/80	grab	M3-80-57	28 %	3.2 %		
		06/16/81	grab	M3-81-22	29 %	6.1		
		07/14/81	grab	M3-81-61	8 %	6.3		
		08/18/81	grab	M3-81-111	14 %	5.9		

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
- Thunder Bay (NW)	(Combined - Effluent (on company property) [e]	07/25/77	grab	M1-77-49	39 %	5.9	1350	- LC50 range 30-50 %
		07/15/80	24hr comp.	M3-80-9	33 %	6.4	2200	
		07/29/80	24hr comp.	M3-80-30	30 %	6.5	1600	
		08/05/80	24hr comp.	M3-80-35	20 %	5.2	2000	
		08/05/81	comp.	M3-81-89	16 %	5.5	2150	
		08/11/81	comp.	M3-81-95	49 %	6.2		
		08/18/81	comp.	M3-81-103	38 %	6.5		
	Clean Water Effluent [e]	07/15/80	24hr comp.	M3-80-10	N.L.	8.1	1100	
		07/29/80	24hr comp.	M3-80-31	N.L.	7.2	700	
		08/05/80	24hr comp.	M3-80-29	N.L.	7.8	750	
		08/05/81	comp.	M3-81-90	49 %	6.9	800	
		08/11/81	comp.	M3-81-96	N.L.	7.5		
		08/18/81	comp.	M3-81-104	>100 %	7.3		-38 % dead in 100 %
GULF OIL - Oakville (C)	Combined + Clean Water	08/05/81	comp.	M3-81-91	34 %	5.8		
		08/11/81	comp.	M3-81-97	70 %*	6.3		-*72 hr. LC50
		08/18/81	comp.	M3-81-105	49 %	6.5		
		06/04/79	grab	79-42	N.L.*	8.2	880	- * 24hr
		06/04/79	grab	79-42	N.L.	8.2	880	
	(Oily Water Trap #4) [e]	12/12/79	grab	79-197	71 %	4.0	630	- slop tank spill a few days before caused lethality
		12/17/79	grab	79-198	N.L.	7.75	418	
		11/24/81	grab	81-173	>100 %	7.7	445	-15 % dead in 100 %
		06/04/79	2 gr.comb.	79-41	N.L.*	7.9	285	- * 24hr
	Cooling Water [e]	06/04/79	2 gr.comb.	79-41	N.L.	7.9	285	Traps 1 & 3
		12/12/79	3 gr.comb.	79-196	N.L.	8.35	274	- Traps 1 & 3
		11/24/81	grab	81-172	N.L.	8.14	285	- Traps 1,2 & 3

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
HAHN BRASS - New Hamburg (WC)	Final Effluent [e]	09/02/75	grab		>100 %			- unaerated - 40 % mortality in 100 %
HALEY INDUSTRIES - Haley Station (SE)	Inside #1 Plant [p]	06/03/77	grab	M2-77-9	14 %	12.1	9100	- LC50 range 10-20 %
	Final Effluent [e]	07/16/76 06/03/77	grab grab	M2-76-24 M2-77-10	N.L. 25 %	7.6 7.7	780 400	- LC50 range 20-30 %
	#1 Plant Effluent [p]	07/16/76 06/03/77	grab grab	M2-76-25 M2-77-9	N.L. >100 %	7.4 12.1	330 8800	- pH adjusted to 6.6 40 % mortality in 100 %
HAWKESBURY MUNICIPAL DISCHARGE - Hawkesbury (SE)	Retaining Area [e]	08/10/77	grab	M2-77-93	100 %	7.5	500	
HOLMES INSULATION - Sarnia (SW)	Disposal Site in Scott Rd. Dump [e] Runoff from spray irrigation [e]	07/26/79 09/28/81	grab	M2-79-22 81-116	N.L. 70 %	8.34 7.27	362 1070	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
IMPERIAL OIL REFINERY								
- Sarnia (SW)	#9 Separator [e]	06/28/76	grab	76-116	N.L.	7.9	190	- unaerated
		10/25/76	grab	76-181	N.L.	7.5	190	- unaerated
		10/25/76	grab	76-181	N.L.	7.5	190	
	#3 Separator [e]	06/28/76	grab	76-115	N.L.	8.2	175	- unaerated
		10/25/76	grab	76-180	N.L.	7.5	175	
		10/25/76	grab	76-180	N.L.	7.5	175	
	#12 Separator [e]	06/28/76	grab	76-118	N.L.	8.0	175	- unaerated
		10/25/76	grab	76-183	N.L.	8.1	185	
		10/25/76	grab	76-183	>100 %	8.1	185	- unaerated - 10 % mortality in 100 %
	#11 Separator [e]	06/28/76	grab	76-118	N.L.	7.9	180	- unaerated
		10/25/76	grab	76-183	N.L.	7.95	185	
		10/25/76	grab	76-182	N.L.	7.95	185	- unaerated
	Bio-oxidation Plant [e]	06/28/76	grab	76-114	N.L.	7.5	860	- unaerated
		10/25/78	grab	76-184	N.L.	7.65	780	
		10/25/76	grab	76-184	>100 %	7.65	780	- unaerated - 30 % mortality in 100 %
		04/18/77	grab	77-48	N.L.	7.8	720	
		05/10/77	grab	77-52	N.L.	6.6	520	
		05/31/77	grab	77-65	N.L.	7.5	470	
		06/21/77	grab	77-95	N.L.	7.0	590	
		07/12/77	grab	77-99	N.L.	6.5	635	
		07/11/78	grab	78-33	<100 %	7.5	750	- 100 % killed all fish in 72 hrs. - unaerated
		07/11/78	grab	78-33	N.L.	7.5	750	
		05/29/79	grab	79-26	N.L.*	7.6		- * 24 hr test
		09/28/81	grab	81-141	N.L.	7.5	515	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
IMPERIAL OIL REFINERY								
- Sarnia (SW) (Continued)	Cooling Water (Separators - #3,9,11 &12 combined) [e]	05/29/79 09/28/81	4-grabs combined grab	79-27 81-42	N.L.* N.L.	8.2 9.6	190 175	- * 24 hr test
	Cooling Water [e]	09/28/81	grab	81-142	N.L.	9.6	175	
	Intake [s]	10/25/76 10/25/76 05/29/79	grab grab grab	76-186 76-186 79-25	N.L. N.L. N.L.*	7.4 7.4 8.3	240 240 200	- unaerated - unaerated - * 24hr test
INCO	Tank farm	07/26/79	grab	M2-79-19	N.L.	8.5	1300	
	Copper Cliff Creek (upstream of Inco WTP) [1]	05/24/77	grab	M1-77-3	<10 %	7.1	2150	- unaerated - 80 % mortality in 10 %
	Copper Cliff Creek (downstream of Inco WTP) [1]	05/24/77	grab	M1-77-4	23 %	7.8	2300	- unaerated
	Final Effluent (below STP) [e]	08/30/77	grab	M1-77-80	>100 %	9/6	2600	- unaerated pH adjusted to 6.5 20 % mortality in 100 %
		08/30/77	grab	M1-77-80	<100 %	9.6	2600	- 100 % killed all fish in 0.5 hrs.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
INCO								
- Copper Cliff (NE) (Continued)	Final Effluent (to Kelly Lake) [e]	08/30/77	grab	M1-77-82	N.L.	7.5	200	- unaerated - anomalous mortalities in 50 %
		08/30/77	grab	M1-77-82	>100 %	7.5	200	- 20 % mortality in 100 %
	North of Hwy #17(at bridge over Copper Cliff Creek) [1]	05/25/76	grab	M1-76-1	18 %	9.0	1700	- unaerated
		06/21/76	grab	M1-76-8	<10 %	10.4	2400	- unaerated - 10 % killed all fish in 4 hrs.
		06/21/76	grab	M1-76-8	24 %	10.4	2400	- unaerated - pH adjusted to 7.0 - LC50 range 18-32%
	Creek Effluent from Cu refinery	06/07/76	grab	M1-76-5	N.L.	9.5	550	- unaerated - pH adjusted to 5.9 - poor temp control after 24 hrs.
		06/07/76	grab	M1-76-5	N.L.	9.5	550	- unaerated
	3rd Lagoon Effluent	06/07/76	grab	M1-76-4	<10 %	10.3	320	- unaerated - 10% killed all fish in 72 hrs- poor temp. control after 24 hrs.
		06/07/76	grab	M1-76-4	<10 %	10.3	325	- unaerated - 10% killed all fish in 48 hrs. pH adjusted to 6.6
- Coniston (NE)	Coniston Creek (at point where it enters Whanapatei R. downstream of INCO) [1]	05/24/77	grab	M1-6-77	N.L.	7.8	350	- unaerated
	Coniston Creek at Hwy 17 (upstream of INCO) [1]	05/24/77	grab	M1-5-77	N.L.	7.4	235	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
INCO								
- Levack (NE)	Tailings Pond [e]	06/14/76	grab	M1-76-6	<10 %	8.0	3300	- 10 % killed all fish in 44 hrs. - LC50 range 3.2-5.6 %
		06/14/76	grab	M1-76-6	4.2 %			
- Garson Mine								
Nolin's Creek (NE)	Nolin Creek (Treatment Plant effluent below pond) [e]	07/14/77	grab	M2-77-37	25 %	9.3	1800	- LC50 range 20-30 % - unaerated
		07/14/77	grab	M2-77-37	<100 %	9.3	1800	- 100 % killed all fish in 0.5 hrs.
Garson Mine Effluent (at (culvert by old Hwy 144)	Garson Mine Effluent (at (culvert by old Hwy 144)	07/14/77	grab	M1-77-38	100 %	9.3	1200	- unaerated
		07/14/77	grab	M1-77-38	N.L.	9.3	1200	
		08/30/77	grab	M1-77-81	<10 %	4.1	1240	- unaerated 90 % mortality in 10 %
		08/30/77	grab	M1-77-81	<100	4.1	1240	- 100 % killed all fish in 24 hrs.
- Shebandowan Mine (NW)								
Tailings Decant [e]	Tailings Decant [e]	07/25/77	grab	M1-77-48	N.L.	7.4	800	- unaerated
		07/25/77	grab	M1-77-48	N.L.	7.4	800	
		07/21/80	grab comp.	M3-80-17	<100 %	8.4	1000	
		06/30/81	grab	M3-81-40	7.8			- 10 % mortality in 100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
INDUSTRIAL GRAIN PRODUCTS								
- Thunder Bay (NW)	Final Effluent (Wheat Starch Manufacturer) [e]	08/08/77 08/08/77 08/08/77 08/19/80 06/01/81 06/30/81 06/30/81 07/13/81 07/13/81	grab grab grab 4hr grab comp. grab grab grab grab	M1-77-60 M1-77-60 M1-77-60 M3-80-58 81-70 M3-81-39 M3-81-39 M3-81-53 M3-81-53	10 % <100 % <100 % 0.7 % 0.7 % 3.6 % <10 % 2.9 % <20 %	3.5 3.5 3.5 3.9 3.1 5.0 5.0 4.8 4.8	880 880 880 2300	- unaerated - unaerated pH adjusted to 6.4 - 100% killed all fish in 24 hrs. - 100 % killed all fish in 0.5 hrs. - sample taken before cleaning - pH adjusted to 7.1 - 10% killed all fish in 24 hrs. - sample taken before cleaning - pH adjusted to 7.1 - 20% killed all fish in 24 hrs.
INGERSOLL STP - Ingersoll (SW)	Final Effluent (before chlorination) [p]	12/12/79 04/10/80	grab grab	79-194 80-48	N.L.* N.L.	7.9	925	- 24 hr test
	Final Effluent (after chlorination) [e]	04/12/80	grab	80-49	43 %			
IROQUOIS MUNICIPAL DISCHARGE - Iroquois (SE)	Municipal Discharge [e]	08/10/77	grab	M2-77-90	38 %	7.1	1400	- LC50 range 30-50 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
IVACO - L'Original (SE)	Final Outfall [e]	07/27/81	grab	M2-81-37	N.L.	8.4	485	
KAMKOTIA MINE - Timmins (NE)	Mine Outfall [e]	08/06/76	grab	M1-76-20	62 %	2.4	3300	- pH adjusted to 7.2 unaerated
		08/06/76	grab	M1-76-20	<10 %	2.4	3300	- 10 % killed all fish in 3 hrs. - unaerated
		05/16/78	grab	78-26	23 %	3.0	930	
		05/16/78	grab	78-26	N.L.	3.0	930	- pH adjusted to 7.5
KANICHEE MINE - Temagami (NE)	Tailings Pond [e]	08/23/77	grab	M1-77-77	>100 %	7.7	920	- 20 % mortality in 100 % unaerated
		08/23/77	grab	M1-77-77	N.L.	7.7	920	
KERR-ADDISON MINE - Virginiatown (NE)	Tailings Pond Decant [e]	10/29/80	grab	80-204	29 %			
KIMBERLY-CLARK OF CANADA - Huntsville (C)	Polishing Lagoons [e]	05/05/80	grab	80-61	93 %	7.5	540	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
KIMBERLY-CLARK OF CANADA								
- St. Catharines (WC)	Final Effluent [e]	05/17/76	grab	76-66	N.L.	7.8	300	
		05/17/76	grab	76-66	58 %	7.8	300	- unaerated
		02/28/77	grab	77-14	N.L.	7.1	320	
		04/23/80	grab	80-55	N.L.	7.3	293	
- Terrace Bay (NW)	Pulp Mill Effluent [p]	08/09/77	grab	M1-77-59	39 %	7.1	1250	- LC50 range 30-50 %
	Culvert at Hwy.17 [e]	07/30/80	2.5hr grab comp.	M3-80-28	47 %	6.2	1450	
		08/05/80	4hr grab comp.	M3-80-36	37 %	4.1	1300	
		08/12/80	24hr grab comp.	M3-80-48	30 %	6.1	1500	
		08/19/80	24hr grab comp.	M3-80-52	35 %	4.2		
		07/21/81	20hr comp.	M3-81-62	13 %	4.3	2000	
		07/22/81	24hr comp.	M3-81-63	6 %	4.7	1950	
		07/23/81	24hr comp.	M3-81-66	7 %	7.0	2050	
		07/24/81	24hr comp.	M3-81-68	12 %	6.2	1800	
		07/25/81	24hr comp.	M3-81-70	11 %	4.0	1800	
		07/26/81	24hr comp.	M3-81-72	9 %	3.6	1900	
		07/27/81	24hr comp.	M3-81-74	9 %	3.7		
		07/28/81	24hr comp.	M3-81-76	17 %	7.6		

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
KIMBERLY-CLARK OF CANADA (Continued)								
- Terrace Bay (NW)	Discharge to Moberly Bay [e]	08/05/80	grab	M3-80-37	22 %	6.8	1300	
		08/11/80	grab	M3-80-49	30 %	6.4	1200	
		08/19/80	grab	M3-80-53	20 %	6.1		
		06/23/81	grab	M3-81-32	81 %	7.0		-taken in bay
		06/25/81	grab	M3-81-34	81 %	7.2		-taken in bay
		07/24/81	grab	M3-81-69	11 %	6.8	1850	
		07/25/81	grab	M3-81-71	13 %	6.6	1700	
		07/26/81	grab	M3-81-73	21 %	6.6	1600	
		07/27/81	grab	M3-81-75	15 %	6.5		
		07/28/81	grab	M3-81-77	21 %	6.5		
		07/29/81	grab	M3-81-80	17 %	6.6		
		07/30/81	grab	M3-81-81	14 %	7.0		
Bridge at Lake A [p]		07/23/81	grab	M3-81-67	8 %	6.5	1800	
		07/22/81	grab	M3-81-64	14 %	6.2	1900	
		07/28/81	grab	M3-81-78	35 %	7.1		
Last Highway Crossing [p]		07/22/81	grab	M3-81-65	6 %	6.2	2250	
		07/28/81	grab	M3-81-79	54 %	7.4		
		08/24/81	grab	M3-81-112	44 %	10.2		
		08/24/81	grab	M3-81-112	67 %	10.0		-stored for 2 day
		08/24/81	grab	81-129	44 %	10.5	1650	-hard water used to dilute
		08/24/81	grab	81-129	38 %	10.5	1650	-soft water used to dilute

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
KRAFT FOODS								
- Ingleside (SE)	Final Effluent [e]	06/21/76	grab	76-110	35 %	8.2	2250	- unaerated
		06/21/76	grab	76-110	27 %	8.2	2250	
		06/23/76	8hr comp.	M2-76-14	40 %	8.3	2475	
		06/24/76	8hr comp.	M2-76-15	38 %	8.3	2600	
		06/24/76	8hr comp.	M2-76-15	24 %	8.5	2500	- LC50 range 18-32 %
		09/14/76	8hr comp. of grabs	M2-76-64	72 %	7.65	165	- unaerated
		09/15/76	"	M2-76-65	75 %			- unaerated
		09/16/76	"	M2-76-66	70 %			- unaerated
		12/07/76	"	76-200	38 %*	7.9	2300	- * 48 hr LC50
		12/08/76	"	76-201	70 %*	7.9	2500	- * 72 hr LC50
		12/09/76	"	76-202	38 %*	7.8	2400	- * 72 hr LC50
		02/21/77	grab	77-10	70 %	7.7	2050	- unaerated LC50 range 50-100 %
		07/12/77	grab	77-55	N.L.	7.3	395	
	Lagoon prior to chlorination [p]	07/12/77	grab	M2-77-52	17 %	8.1	2950	
		07/12/77	grab	M2-77-52	25 %	8.1	2950	- unaerated LC50 range 20-30 %
		09/05/77	grab	M2-77-116	34 %			
		09/05/77	grab	M2-77-116	56 %			- unaerated
		05/17/78	grab	M2-78-15	47 %	8.2	2450	- unaerated
		05/17/78	grab	M2-78-15	37 %	8.2	2450	
		05/17/78	grab	M2-78-15	23 %	8.2	2450	- unaerated
		05/17/78	grab	M2-78-15	59 %	8.2	2450	
		05/17/78	grab	M2-78-15	<100 %	8.2	2450	- unaerated - 100 % killed all fish in 24 hrs.
		05/17/78	grab	M2-78-15	<100 %	8.2	2450	- 100 % killed all fish in 24 hrs.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
KRAFT FOODS - Ingleside (SE) (Continued)	Lagoon prior to chlorin- ation (cont'd) [p]	10/17/78 10/17/78 10/17/78 10/17/78 10/17/78	grab grab grab grab grab	M2-78-283 M2-78-283 M2-78-283 M2-78-283 M2-78-283	<20 % 24.5 % 32 % 24.5 % 33 %	8.1 8.1 8.1 8.1 8.1	2400 2400 2400 2400 2400	- 20 % killed all fish in 72 hrs. - unaerated - LC50 range 20-30 % - Treatment I - LC50 range 20-30 % - unaerated - Treatment II
	Plant Outfall to lagoon [p]	09/15/77 09/15/77	grab grab	M2-77-115 M2-77-115	30 % 2.2 %	5.0 5.0	700 700	- unaerated - LC50 range 1-5
	Cooling Water Outfall [e]	07/12/77	grab	M2-77-54	N.L.	6.8	205	
	Lagoon after chlorination [p]	07/12/77	grab	M2-77-53	16 %	7.9	3000	
LACOURS LUMBER - Lakstock (NE)	Impound Area [p]	09/08/76 09/08/76	grab grab	M1-76-32 M1-76-32	<10 % 70 %	7.1 7.1	780 780	- 10 % killed all fish in 72 hrs. - unaerated
LADNEY PROPERTIES - Sarnia (SW)	Pond [p]	04/18/80	grab	80-53	N.L.	6.7	492	
LINDSAY SEWAGE TREATMENT PLANT - Lindsay (C)	South Outfall [e]	03/06/78 03/06/78	grab grab	78-7 78-7	52 % 66 %	6.9 7.5	1600 1100	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
LUSTER DIVISION NATIONAL HARDWARE SPECIALITIES LTD. - Wallaceburg (SW)	Final Effluent [m]	07/07/75	grab		>100 %			- 40 % mortality at 100 %
MADAWASKA MINES - Bancroft (SE)	Final Ditch [e]	09/19/77	grab	M2-77-118	N.L.	7.7	3750	
MONSANTO - Sarnia (SW)	ABS Plant [m]	10/25/76	grab	76-187	>10 %	7.2	2600	- 10 % killed all fish in 48 hrs. - unaerated
		10/25/76	grab	76-187	10 %	7.2	2600	- " "
NESTLES - Chesterville (SE)	Lagoon Discharge [e]	07/23/76	grab	M2-76-30	42 %	7.6	700	- unaerated
		07/23/76	grab	M2-76-30	N.L.*	7.6	700	- * at 56 %
		08/27/76	grab	M2-76-47	N.L.*	7.55	690	- * 24 hr unaerated
		07/13/77	grab	M2-77-57	N.L.	7.5	920	
NITROCHEM - Maitland (SE)	Surface Runoff [e]	07/05/76	grab	M2-76-16	>10 %	8.45	51000	- 10 % killed all fish in 0.5hr. - unaerated
		07/05/76	grab	M2-76-16	>1.0 %	8.45	51000	- 1 % killed all fish in 1hr - unaerated
		08/16/76	grab	M2-76-40	1.4 %			
		06/16/77	grab	M2-77-25	1.4 %	9.1	6300	
		08/08/77	grab	M2-77-85	1.7 %	9.1	4000	
		08/25/75	grab	M2-77-104	1.8 %	8.9	5300	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
NITROCHEM - Maitland (SE) (Continued)	Final Effluent [e]	06/21/76	grab	M2-76-10	< 10 %	8.5	22000	-unaerated - 10 % killed all fish in 0.5hr.
		06/21/76	grab	M2-76-10	< 1.8 %	8.5	22000	-unaerated - 1.8 % killed all fish in 1.5hr.
		08/16/76	grab	M2-076-39	0.56 %			Unaerated 0.56 % killed all fish in 2hrs.
		06/16/77	grab	M2-77-26	5.3 %	6.6	6500	
		08/08/77	grab	M2-77-86	1.3 %	9.7	3400	
		08/25/77	grab	M2-77-103	0.62 %	10.3	4600	
		08/25/77	grab	M2-77-106	16 %	10.3	4600	-to remove NH ₃ (single pass)
		08/25/77	grab	M2-77-108	25 %	10.3	4600	-treated to remove NH ₃ (double pass)
		06/30/81	grab	81-97	7 %	8.7	2950	
		06/30/81	grab	81-97	28 %	8.7	2950	-clino treated
	Service Water [s]	06/30/81	grab	81-98	N.L.	8.17	280	
NORANDA MINES - Manitowadge (NW)	Final Effluent [e]	09/13/77	grab	M1-77-89	39 %*	8.8	3000	- unaerated * 24hr LC50
		09/13/77	grab	M1-77-89	< 100 %	8.8	3000	- 100 % killed all fish in 2 hrs.
		08/25/81	grab	M3-81-116	12 %	9.2	3750	
	CN Seepage [e]	08/25/81	grab	M3-81-115	1.3 %	5.1	6200	
Normick Ltd. - Cochrane (NE)	Main Ditch (Leachate) [e]	07/27/76	grab	M1-76-17	> 100 %	7.4	1420	-30 % dead in 100 %
		07/27/76	grab	M1-76-17	< 10 %	7.4	1430	-unaerated - 10 % killed all fish in 33 hrs.
		08/27/79	grab	79-152	< 2.5 %	6.2	910	-unaerated - 2.5 % killed all fish in 33 hrs.
		08/27/79	grab	79-152	15 %	6.2	910	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
NORTHERN TELECOM - Ottawa (SE)	Lagoon Discharge (Mill Plant) [e]	06/20/77	grab	M2-77-30	N.L.	6.9	380	-unaerated
	Lagoon Discharge (Central Lab) [e]	06/20/77	grab	M2-77-31	N.L.	9.7	450	-unaerated
NORTHERN WOOD PRESERVERS - Thunder Bay (NW)	Final Effluent [e]	08/08/77 08/08/77 06/15/81 07/06/81 08/04/81 07/06/81	grab grab grab grab grab grab	M1-77-58 M1-77-58 M3-81-13 M3-81-52 M3-81-82 M3-81-112	N.L. N.L. 6 % N.L. N.L. N.L.	6.7 6.7 6.0 5.8 5.9 5.8	290 290	- unaerated
ONTARIO PAPER COMPANY LTD. - Thorold (WC)	Copeland Condensates [p] [p]	08/13/79	grab	79-113	62 %	6.6	180	
	Groundwood White Water [p]	08/13/79	grab	79-112	24 %	4.7	1350	- LC50 range 18-32 %
	Na Sulfite white water [p]	08/13/79	grab	79-110	32 %	5.8	710	- LC50 range 18-56 %
	Receiving Water [s]	01/04/79 08/13/79	grab grab	79-2 79-110	N.L.* N.L.	7.4 8.2	290 265	- 24hr LC50 at 100 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ONTARIO PAPER COMPANY LTD. - Thorold (WC) (Continued)	Final Effluent [e]	05/17/76 05/17/77 02/28/77 01/04/79 08/13/79	grab grab grab grab grab	76-68 76-68 77-11 79-1 79-114	24 % 76 % N.L. <100 % N.L.	7.9 7.9 7.2 7.0 6.8	1125 1125 1020 1700 345	- LC50 range 18-32 % - unaerated - 100 % killed all fish in 24 hrs.
PAMOUR MINE - Timmins (NE)	Tailings Pond Decant [e]	10/28/80	grab	80-201	24 %	7.9	530	
PARIS MUNICIPAL TREATMENT PLANT - Paris (WC)	Influent [p]	11/01/76 04/12/77 03/16/81 03/19/81	grab grab grab grab	76-191 77-44 81-27 81-31	1.8 % 14 % 15 % 19 %	8.0 9.0 8.65 8.57	990 2700 1700 1800	-LC50 range 1-3% - unaerated -LC50 range 10-20%
	Effluent [e]	11/01/76 04/12/77 03/17/81 03/19/81	grab grab grab grab	76-192 77-45 81-28 81-30	8 % 24 % 61 % 54 %	7.7 7.6 7.8 8.0	1190 2000 2050 2650	- unaerated -before chlorination
PENMAN'S TEXTILES - Paris (WC)	Final Effluent [m]	11/01/76 03/16/81 03/19/81 03/20/81	grab grab grab composite	76-190 81-26 81-33 81-35	<1.0 % 7.1 % 71 % 11 %	7.1 9.75 8.60 7.22	1230 5900 4575 3450	- 1 % killed all fish in 96 h
	Intake [s]	03/17/81 03/19/81	grab grab	81-29 81-32	N.L. N.L.	7.8 7.8	600 800	-Grand River -Grand River after filtration

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
PETROSAR								
- Moore Township (SW)	Final Effluent [e]	07/31/79	grab	M2-79-24	N.L.	7.3	2725	
		07/10/80	grab	M2-80-5	N.L.			
		07/12/80	grab	M2-80-6	N.L.			
		07/15/80	grab	M2-80-7	N.L.			
		09/11/80	grab	M2-80-14	N.L.			
		09/28/81	grab	81-145	N.L.	7.1	1240	
P.L. ROBERTSON								
- Milton (C)	Final Effluent [e]	09/02/75	grab		N.L.			
POLYSAR								
- Sarnia (SW)	66" Main Sewer [e]	04/13/76	grab	76-47	75 %	7.5	480	- LC50 range 50-100 %
		06/14/76	grab	76-91	32 %	7.6	540	
		06/14/76	grab	76-91	<100 %	7.6	540	- 100 % killed all fish in 24 hrs-stored tightly covered at 40C
		06/14/76	grab	76-91	<100 %	7.6	540	- 100 % killed all fish in 24 hrs-stored uncovered at 40C
		06/14/76	grab	76-91	<100 %	7.6	540	- 100 % killed all fish in 1.5 hrs - stored tightly covered at 150C
		06/14/76	grab	76-91	<100 %	7.6	540	- 100 % killed all fish in 24 hrs - stored uncovered at 150C
		07/26/76	grab	76-149	>100 %	7.6	550	- unaerated - 10 % mortality at 100 %
		07/26/76	grab	76-151	N.L.	7.6	550	
		07/26/76	grab	76-149	N.L.	7.6	550	- under an O ₂ atmosphere
		07/26/76	grab		>100 %	7.6	550	- continuous flow 25 % mortality at 100 %
		08/23/76	grab	76-153	40 %	7.6	890	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
POLYSAR								
- Sarnia (SW) (Continued)		08/22/76	grab	76-153	35 %	7.7	680	- unaerated
		08/22/76	grab	76-153	59 %	7.7		
		08/22/76	grab	76-153	43.5 %	7.7	680	- unaerated -O ₂ head treated
		06/27/79	grab	M2-79-5	N.L.	8.4	620	
		08/01/79	grab	M2-79-26	N.L.	8.0	612	
		08/16/79	grab	M2079-35	N.L.	7.9	695	
Stereo API								
Separator [e]		03/02/76	grab	76-11	8.4 %			
		06/14/76	grab	76-90	7.6 %			
		06/14/76	grab	76-90	< 3.2 %	7.2	155	- 90 % mortality at 3.2 %
		07/26/76	grab	76-150	16 %	7.35	160	
		07/26/76	grab	76-150	11 %	7.35	160	- unaerated
		08/23/76	grab	76-154	<100 %	7.7	180	- 90 % mortality at 100 %
		06/27/79	grab	M2-79-4	28 %	7.3	191	
		08/01/79	grab	M2-79-30	33 %	7.7	210	
		08/16/79	grab	M2-79-38	45 %	7.9	200	
		03/05/80	grab	80-35	7.1 %	7.7	160	
		09/25/80	grab	80-175	>100 %			- 30 % mortality in 100 %
		09/25/80	grab	M2-80-17	63 %			
Esso/Polysar								
boundary (St. Clair River) [1]		06/14/76	grab	76-93	N.L.	8.35	175	
72" Sewer [e]								
		06/14/76	grab	76-92	N.L.	7.45	205	
Hwy 40 Ditch [e]								
(end)		06/14/76	grab	76-88	> 100 %	8.35	200	- 10% mortality at 100%
54" Sewer [e]								
		04/13/76	grab	76-48	N.L.	7.9	210	
		06/14/76	grab	76-89	> 100 %	7.85	230	- 10% mortality in 100%

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
POLYSAR								
- Sarnia (SW) (Continued)	Service Water [s]	07/14/76	grab	76-94	N.L.	8.1	180	
		07/26/76	grab	76-148	>100 %	7.6	550	- 10 % mortality in 100 %
		07/27/76	grab	76-148	>100 %			- 10 % mortality in 100 % unaerated
		08/22/76	grab	76-153	N.L.	7.6	180	- unaerated
		11/01/76	grab	76-188	N.L.	7.9	200	
		11/01/76	grab	78-189	N.L.	7.8	200	- unaerated
	Styrene II [p] plant effluent after treatment	08/16/79	grab	M2-79-39	2.3 %	9.2	430	
	Boat Water [p]	09/25/80	grab	M2-80-15	13 %			- 10:1 dilution at start
		09/25/80	grab	M2-80-16	100 %			- air stripped site
REICHHOLD CHEMICAL								
- Thunder Bay (NW)	Final Effluent [e]	08/02/77	grab	M1-77-56	<10 %	7.9	1500	- unaerated - 10 % killed all fish in 20 hrs.
		08/02/77	grab	M1-77-56	<100 %	7.9	1500	- 100 % killed all fish in 4 hrs.
		09/07/77	grab	M1-77-83	N.L.	8.0	860	- unaerated
		09/07/77	grab	M1-77-83	N.L.	8.0	860	- unaerated
		07/30/80	4hr grab comp.	M3-80-26	19 %	7.6	1550	
		06/30/81	grab	M3-81-38	4 %	7.4		
		07/13/81	grab	M3-81-54	43 %	7.7		
RIO ALGOM MINES MILLIKEN-STANLEIGH MINES								
- Crotch Lake (NE)	Effluent from Crotch Lake Plant (CL-02) [p]	06/20/79	grab	79-49	N.L.	13.3	5600	- unaerated - pH adjusted to 7.8
		06/20/79	grab	79-49	7.5 %	13.3	5600	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE . NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
RIO ALGOM MINES MILLIKEN-STANLEIGH MINES - Crotch Lake (NE) (Continued)	Feed to Crotch Lake Treat- ment Plant (CL-01) [p]	06/20/79	grab	79-48	N.L.	2.1	1400	- unaerated - pH adjusted to 7.9
	Crotch Lake Outlet (CL-04) [e]	08/23/76 06/20/77 06/20/77 06/19/79 08/22/79	grab grab grab grab grab	M1-76-25 M1-77-24 M1-77-24 79-50 79-125	N.L. N.L. N.L. N.L. N.L.	7.3 7.1 7.1 7.6 7.6	330 260 260 295 280	- unaerated - unaerated - unaerated - unaerated - unaerated
RIO ALGOM MINES NORDIC PROPERTY - Elliot Lake (NE)	Serpent R. at Hwy 17 [1]	08/22/79	grab	79-136	N.L.	7.2	165	- unaerated
	North Nordic Lake Effluent (N-19) [e]	06/19/79 08/22/79	grab grab	79-53 79-127	N.L. N.L.	8.2 7.3	1220 1310	- unaerated - unaerated
	Effluent from Nordic Treat- ment Plant (N-18) [p]	06/19/79 06/19/79 08/22/79 08/22/79	grab grab grab grab	79-52 79-52 79-126 79-126	46 % 24 % 26.3 % 100 %	12.4 12.4 11.7 11.7	2500 2500 2150 2150	- unaerated LC50 range 30-70 % pH adjusted to 7.8 - unaerated LC50 range 20-30 % - unaerated pH adjusted to 8.2

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
RIO ALGOM MINES NORDIC PROPERTY								
- Elliot Lake (NE)	Feed to Nordic Treatment Plant (N-17) [p]	06/19/79	grab	79-51	N.L.	2.1	2000	- pH adjusted to 7.6 unaerated
	Buckles Creek at Hwy 108 [p]	08/30/76	grab	M1-76-27	>100 %	6.0	920	- unaerated - 30 % mortality in 100 %
		07/11/77	grab	M1-77-33	N.L.	6.9	1050	- unaerated
		07/11/77	grab	M1-77-33	N.L.	6.9	1050	
RIO ALGOMA MINES PANEL MINE								
- Elliot Lake (NE)	Strike Lake Effluent [e]	09/07/76	grab	M1-76-29	20 %	3.9	430	- unaerated
		09/07/76	grab	M1-76-29	>100 %	3.9	430	- unaerated pH adjusted to 7.0 10 % mortality in 100 %
		06/20/77	grab	M1-77-25	>100 %	4.5	425	- unaerated 30 % mortality in 100 % pH adjusted to 7
		06/20/77	grab	M1-77-25	<100 %	4.5	425	- 100 % killed all fish in 33 hrs.
		08/20/80	grab	80-139	>100 %	8.9	1700	- 40 % mortality in 100 %
RIO ALGOM MINES PRONTO PROPERTY								
- Elliot Lake (NE)	Pronto Effl. at Hwy 17 (PR-01) [1]	08/16/76	grab	M1-76-23	N.L.	6.5	470	
		07/11/77	grab	M1-77-32	N.L.	6.9	560	- unaerated
		07/11/77	grab	M1-77-32	N.L.	6.9	560	
		06/21/79	grab	79-54	N.L.	6.4	660	- unaerated
		08/22/79	grab	79-128	N.L.	7.0	405	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
RIO ALGOM MINES PRONTO PROPERTY								
- Elliot Lake (NE) (Continued)	Treated Effl. leaving Treat- ment Plant (PR-03) [e]	06/19/79 06/19/79 06/19/77	grab grab grab	79-56 79-56 79-56	N.L. N.L.* N.L.*	12.1 12.1 12.1	1340 1340 1340	- pH adjusted to 7.8 unaerated - unaerated * at 30 % - unaerated * at 50 %
	Treated Effl. 0/F settling area (PR-04) [p]	06/19/79	grab	79-57	N.L.	11.5	840	- unaerated pH adjusted to 7.8
	Feed to Pronto Treatment Plant (PR-02) [p]	06/19/79	grab	79-55	N.L.	2.2	980	- pH adjusted to 7.8 unaerated
RIO ALGOM MINES QUIRKE PROPERTY								
- Elliot Lake (NE)	Dunlop Lake at Pumphouse (Q-19) [s]	06/20/79 08/22/79	grab grab	79-62 79-135	N.L. N.L.	7.6 7.9	35 38	- unaerated - unaerated
	Quirke Mine (Q-05) [p]	08/22/79 08/22/79 08/22/79	grab grab grab	79-129 79-129 79-129	17 % N.L. <100 %	9.8 9.8 9.8	2050 2050 2050	- unaerated LC50 range 10-30 % - unaerated Dowex resin treated for removal of ammonia - unaerated pH adjusted to 8.5 - 100 % killed all fish in 24 hrs.
	Serpent River at Rio Algom railroad [1]	06/20/79	grab	79-63	N.L.	8.6	580	- unaerated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
RIO ALGOM MINES QUIRKE PROPERTY								
- Elliot Lake (NE) (Continued)	Serpent River below effluent addition, at flow station (Q-09) [1]	06/20/79 08/22/79	grab grab	79-61 79-134	N.L. N.L.	8.5 7.0	720 1040	- unaerated - unaerated
	Serpent River above effluent addition, at Mine Rd. (Q-08) [1]	06/20/79 08/22/79	grab grab	79-60 79-153	N.L. N.L.	8.0 7.6	305 2000	- unaerated - unaerated
	Tailings Effluent to Serpent River at Hwy 108 (Q-06) [1]	06/20/79 06/20/79 08/22/79	grab grab grab	79-59 79-59 79-132	N.L. N.L.* 70 % N.L.	10.3 10.3 10.3 7.0	2000	- unaerated pH adjusted to 7.6 - unaerated * at 30 % - unaerated - unaerated
	Tailings Effluent after treat- ment (Q-3) [e]	07/11/77 07/11/77 06/20/79	grab grab grab	M1-77-31 M1-77-31 79-58	>100 %* 100 % <100 %	7.7 7.7 11.4	2400 2400 2200	- unaerated * 24 hr LC50 20 % mortality in 100 % - unaerated pH adjusted to 7.8 100 % killed all fish in 48 hrs.
	Dam Effluent at Quirke [p]	06/20/79 08/22/79	grab grab	79-58 79-131	N.L.* N.L.	11.4 7.6	2200 2400	- unaerated * at 50 % - unaerated
		08/30/76 06/10/80 06/10/80 08/20/80	grab grab grab	M1-76-26 80-91 80-92 80-138	<10 % 48 % N.L. 59 %	7.0 8.5 8.5 8.3	2200 2500 2750 2600	- 80 % mortality in 10 % unaerated - clinoptilolite treated

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
ROHM & HAAS - Morrisberg (SE)	Cooling Water [e]	07/12/77	grab	M2-77-51	N.L.	7.2	310	
SCHUMACHER MINE - Timmins (NE)	Tailings Pond Decant [e]	10/28/80	grab	80-203	20 %	7.6	1750	
SCOTT ROAD DUMP - Sarnia	Outfall to Township Ditch [e]	06/27/79 07/19/79 07/26/79 08/01/79 09/25/80	grab grab grab grab grab	M2-79-8 M2-79-14 M2-79-20 M2-79-29 M2-80-18	66 % >100 % N.L. N.L. N.L.	9.34 8.5 8.19 7.8 N.L.	271 1200 2180 1780	- 30 % mortality in 100 %
SHELL CANADA - Corunna (SW)	Cooling Water [e]	05/29/79 09/28/81	grab grab	79-20 81-143	N.L.* N.L.	8.1 8.3	490 163	- * 24 hr test
	Total Effl. [e]	07/12/76 05/29/79 09/28/81	3-gr comb. " grab	76-132 79-22 81-144	N.L. N.L.* N.L.	7.7 8.0 9.3	250 340 255	- unaerated - * 24 hr test
	Intake [s]	07/12/76 05/29/79	grab grab	76-133 79-21	N.L. N.L. *	8.3 8.4	205	- unaerated - * 24 hr test at 100 %
SHELL CANADA - Oakville (C)	Final holding pond [e]	07/28/75 06/11/79 06/11/79 04/13/81 11/24/81	grab grab grab grab grab	79-46 79-46 79-46 81-37 81-171	N.L. N.L. N.L.* 38 % N.L.	7.8 7.7 7.7 7.3 7.79		- continuous flow - * 24 hr LC50
							2200 1850	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
SHERMAN MINE - Temagami (NE)	1/4 mile below Weir on Tetapaga R. [1]	06/29/76	grab	M1-76-10	N.L.	7.5	480	- unaerated
	South Pit [d]	07/20/77	grab	M1-77-44	>100 %	2.9	2500	- pH adjusted to 6.3 30 % mortality in 100%
		07/20/77	grab	M1-77-44	<100 %	2.9	2500	- 100 % killed 11 fish in 1.5 hrs.
SKYWAY SEWAGE TREATMENT PLANT - Burlington (C)	Mine Effluent [e]	09/20/76	grab	M1-76-42	N.L.	8.3	580	- unaerated
	Before Chlorination [e]	10/04/76	grab	76-167	>100 %	7.9	740	- 10 % mortality in 100%
SPRUCE FALLS POWER & PAPER CO. - Kapuskasing (NE)	Red liquor stream [p]	11/19/79	grab	79-172	1.0 %	3.1	2750	
	Condensate stream [p]	11/09/79	grab	79-171	2.3 %	1.8	5400	
	Magnefite stream [p]	11/19/79	grab	79-173	13 %	2.65	1160	- LC50 range 9-18 %

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
SPRUCE FALLS POWER & PAPER CO. - Kapuskasing (NE) (Continued)								
	TMP chip washer [p]	07/15/78 07/15/78	grab grab	78-41 78-41	0.9 % 1.7 %	5.0 5.0	160 160	- pH adjusted to 6.5
	TMP stock liquor [p]	07/15/78	grab	78-43	2.3 %	6.2	70	
	Groundwood mill stock liquor [p]	05/19/77	grab	M1-77-2	14 %	6.8	79	- LC50 range 10-20 %
	Chip Washer water [p]	06/14/77	grab	M1-77-19	<2 %	5.3	155	- 2 % killed all fish in 12 hrs.
	4th Stage reject liquor [p]	06/14/77 07/15/78 07/15/78	grab grab grab	M1-77-18 78-42 78-42	<2 % 3.6 % 11.8 %	5.4 2.3 2.3	160 540 540	- 2 % killed all fish in 24 hrs. - pH adjusted
	Warmwater intake to TMP [p]	06/15/78	grab	M1-77-20	N.L.	7.5	108	
	Pulp Stock - no bleach [p]	06/15/77	grab	M1-77-21	2 %	6.3	140	
	Pulp Stock [p] - with bleach	06/15/77	grab	M1-77-22	<2 %	5.2	240	- 80% mortality in 2%
	Process Warm- water [p]	07/15/78	grab	78-40	>100 %	7.9	85	- 10% mortality in 100%

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
SPRUCE FALLS POWER & PAPER CO.								
- Kapuskasing (NE) (Continued)								
	Main Mill Effluent [e]	07/06/76 07/06/76 07/20/76 07/20/76 09/20/76 09/20/76 08/27/79 11/19/79 05/19/77 08/27/79	grab grab grab gran grab grab grab grab grab grab	M1-76-12 M1-76-12 M1-76-14 M1-76-14 M1-76-40 M1-76-40 79-147 79-174 M1-1-77 79-148	22 % 42 % 14 % 14 % >10 % <10 % 24 % 37 % N.L. 47.7 %	6.3 6.3 3.8 3.8 3.7 3.7 4.0 6.0 6.4 4.9	1400 1400 510 510 530 530 560 486 148 355	- unaerated - LC50 range 32-56 % - unaerated LC50 range 10-20 % - " - unaerated 30 % mortality in 10 % - 10 % killed all fish in 96 hrs. - LC50 range 17.5-32.5 %
	Groundwood whitewater overflow [p]	08/27/79 11/19/79 05/19/77 08/27/79	grab grab grab grab	79-147 79-174 M1-1-77 79-148	24 % 37 % N.L. 47.7 %	4.0 6.0 6.4 4.9	560 486 148 355	- LC50 range 32.5-70 %
	TMP Final Effluent [p]	07/15/78 08/27/79	grab grab	78-44 79-150	3.2 % 1.2 %	6.0 5.0	140 415	- LC50 range 2-5 %
	Ca sulfite effluent [p]	08/27/79 08/27/79	1 gr.every 5 min over 1h 20 min "	79-149 79-149	3.5 % 10 %	2.2 2.2	4150 4150	- pH adjusted to 8.0
	Intake [s]	08/27/79	grab	79-151	N.L.	7.7	110	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO								
- Hamilton (WC)	West Side Open Cut Sewer [e]	06/23/69	grab		.9 %	*		- unaerated red belly dace used
		08/25/75	grab		3.0 %			- unaerated
		08/25/75	grab		2.4 %			- unaerated
		09/09/75	grab		4.2 %			- unaerated
		04/05/76	grab	76-42	2.2 %	7.35	780	- unaerated
		06/06/77	grab	77-78	8.5 %	7.7	470	
		01/12/78	grab	78-2	1.4 %	7.5	720	- continuous flow bioassay LC range 1-2 %
		01/12/78	grab	78-2	0.7 %	6.6	750	
		01/12/78	grab	78-2	1.1 %	7.5	720	
		03/13/78	grab	78-13	3.8 %	8.2	560	
		05/24/78	24hr comp.	M2-78-17	7.0 %	7.32	518	
		05/25/78	24hr comp.	M2-78-21	N.L.*	7.9	740	- * at 60 %
		05/26/78	24hr comp.	M2-78-25	N.L.	8.0	640	
		05/30/78	24hr comp.	M2-78-29	N.L.	7.7	640	
		05/31/78	24hr comp.	M2-78-35	N.L.	7.65	630	
		06/01/78	24hr comp.	M2-78-39	N.L.	7.45	440	
		06/06/78	24hr comp.	M2-78-43	49 %	7.6	550	- LC50 range 40-60 %
		06/07/78	24hr comp.	M2-78-48	N.L.	7.25	600	
		06/08/78	24hr comp.	M2-78-53		7.7	600	
		06/13/78	24hr comp.	M2-78-58	35 %	7.98	580	
		06/13/78	grab	M2-78-61	1.7 %	7.5	560	
		06/14/78	24hr comp.	M2-78-64	17.2 %	8.15	560	- LC50 range 10-30 %
		06/13/78	grab	M2-78-61	1.4 %	7.7	440	- LC50 range 1-2 %
		06/13/78	grab	M2-78-97	N.L.*			- * at 10 %
		06/13/78	grab	M2-78-98	N.L.*			- Effluent renewed every 48 hrs - * at 5 %
		06/13/78	grab	M2-78-99	N.L.*			- Effluent renewed every 24 hrs - * at 10 %
		06/13/78	grab	M2-78-61	2.2 %			

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO								
- Hamilton (WC)	West Side	06/15/78	24hr comp.	M2-78-69	9.4 %	8.05	660	
(Continued)	Open Cut	06/16/78	24hr comp.	M2-78-73	N.L.	7.3	620	
	Sewer [e]	06/17/78	24hr comp.	M2-78-75	N.L.	7.6	440	
		06/18/78	24hr comp.	M2-78-77	N.L.	7.35	610	
		06/19/78	24hr comp.	M2-78-81	N.L.	7.45	605	
		06/19/78	24hr comp.	M2-78-83	>100 %	8.0	620	- 40% mortality in 100%
		06/20/78	24hr comp.	M2-78-85	N.L.	7.8	610	
		06/21/78	24hr comp.	M2-78-90	>100 %	7.95	620	- 20% mortality in 100%
		06/22/78	24hr comp.	M2-78-94	N.L.	7.9	600	
		06/27/78	24hr comp.	M2-78-101	N.L.	8.1	660	
		06/28/78	24hr comp.	M2-78-108	N.L.	8.15	680	
		06/29/78	24hr comp.	M2-78-111	N.L.	8.35	660	
		07/05/78	24hr comp.	M2-78-120	N.L.	7.97	610	
		07/06/78	24hr comp.	M2-78-124	N.L.	8.37	650	
		07/07/78	24hr comp.	M2-78-127	N.L.	7.4	680	
		07/11/78	24hr comp.	M2-78-128	29 %	7.65	560	
		07/12/78	24hr comp.	M2-78-143	N.L.	7.9	630	
		07/18/78	24hr comp.	M2-78-153	28 %	6.85	640	- LC50 range 20-40 %
		08/22/78	grab	M2-78-237	45 %	7.5	620	- LC50 range 40-50 %
		08/24/78	grab	M2-78-244	34.7 %	8.0	580	- LC50 range 30-40 %
		08/29/78	grab	M2-78-250	N.L.	8.0	540	
		08/31/78	grab	M2-78-257	>100 %	7.6	500	- 10% mortality in 100%
		09/06/78	grab	M2-78-261	1.75 %	8.7	690	- LC50 range 1-3%
		09/08/78	grab	M2-78-270	3.8 %	7.2	540	- LC50 range 3-5%
		09/12/78	grab	M2-78-271	8.5 %	7.5	520	- LC50 range 7-10%
		09/14/78	grab	M2-78-281	31 %	7.3	600	
		01/12/78	grab	78-2	1.75 %			- continuous flow LC50 range 1.25-2.5%
		01/12/78	grab	78-2	1.75 %			- continuous flow LC50 range 1.25-2.5%

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO								
- Hamilton (WC) (Continued)	West Side Open Cut [e] Sewer	07/09/80 07/23/80	grab grab	80-107 80-110	2-5 % 12.3 %	7.3	530	
	North West Outfall [e]	05/30/78 05/31/78 06/01/78 06/03/78 06/07/78 06/08/78	24hr comp. 24hr comp. 24hr comp. 24hr comp. 24hr comp. 24hr comp.	M2-78-32 M2-78-36 M2-78-40 M2-78-45 M2-78-50 M2-78-55	3.7 % 17 % N.L. N.L. N.L. <75 %	8.8 8.05 7.45 7.4 7.5 8.4	590 590 405 550 540 610	- LC50 range 3-5 % - LC50 range 50-100 % - LC50 range 0.75-1 % - 20 % killed all fish in 96 hrs.
		06/13/78 06/14/78 06/15/78 06/17/78 06/18/78 06/19/78 06/20/78 06/22/78 06/27/78 06/28/78 06/29/78 07/05/78 07/06/78 07/07/78 07/11/78 07/12/78 07/13/78	24hr comp. 24hr comp.	M2-78-60 M2-78-66 M2-78-71 M2-78-76 M2-78-78 M2-78-82 M2-78-86 M2-78-95 M2-78-102 M2-78-109 M2-78-112 M2-78-121 M2-78-125 M2-78-128 M2-78-132 M2-78-142 M2-78-147	N.L. N.L. 72 % N.L. N.L. N.L. N.L. N.L. 7.2 % 13.1 % 32 % 78 % 0.88 % 17.4 % 7.7 % 14 % <20 %	7.4 7.6 8.4 7.95 8.25 7.85 7.7 7.8 9.1 8.7 8.3 8.37 9.25 8.3 8.4 7.9 7.4	530 500 560 415 600 565 580 580 640 600 610 520 620 680 620 635 615 500	- LC50 range 5-10 % - LC50 range 20-50 % - LC50 range 60-100 % - LC50 range 0.75-1 % - range 5-10 % - LC50 range 5-10 % - LC50 range 10-20 % - 20 % killed all fish in 96 hrs. - LC50 range 2-5 %
		07/09/80 07/23/80	grab grab	80-108 80-109	N.L. 87 %	7.7 8.1	430	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO								
- Hamilton (WC)	#2 Pumphouse [s]	05/24/78	24hr comp.	M2-78-19	100 %	8.1	510	
(Continued)		05/25/78	24hr comp.	M2-78-23	N.L.	8.2	580	
		05/26/78	24hr comp.	M2-78-27	N.L.	8.4	570	
		05/30/78	24hr comp.	M2-78-31	N.L.	8.05	580	
		05/31/78	24hr comp.	M2-78-34	N.L.	8.15	525	
		06/01/78	24hr comp.	M2-78-38	N.L.	8.05	380	
		06/06/78	24hr comp.	M2-78-42	N.L.	7.9	520	
		06/07/78	24hr comp.	M2-78-47	N.L.	7.5	520	
		06/08/78	24hr comp.	M2-78-52	N.L.	8.0	510	
		06/13/78	24hr comp.	M2-78-57	N.L.	8.25	480	
		06/14/78	24hr comp.	M2-78-63	N.L.	8.2	565	
		06/15/78	24hr comp.	M2-78-68	N.L.	7.7	510	
		06/16/78	24hr comp.	M2-78-72	N.L.	8.25	500	
		06/17/78	24hr comp.	M2-78-74	N.L.	7.3	490	
		06/18/78	24hr comp.	M2-78-79	N.L.	7.55	520	
		06/19/78	24hr comp.	M2-78-80	N.L.	7.9	510	
		06/20/78	24hr comp.	M2-78-84	N.L.	8.5	540	
		06/21/78	24hr comp.	M2-78-89	N.L.	7.8	560	
		06/22/78	24hr comp.	M2-78-93	N.L.	7.6	540	
		07/11/78	24hr comp.	M2-78-130	N.L.	8.5	490	
		07/12/78	24hr comp.	M2-78-139	N.L.	7.5	540	
		07/13/78	24hr comp.	M2-78-145	N.L.	7.35	525	
		07/09/80	grab	80-106	N.L.	7.8	485	
		07/23/80	grab	80-112	N.L.	8.0	410	
	#3 Open Hearth [e]	05/24/78	24hr comp.	M2-78-16	N.L.	8.4	540	
		05/25/78	24hr comp.	M2-78-20	N.L.	8.25	620	
		05/26/78	24hr comp.	M2-78-24	>100 %	8.1	550	- 10% mortality in 100%
		05/30/78	grab	M2-78-28	N.L.	7.95	560	
		06/06/78	24hr comp.	M2-78-44	N.L.	7.6	510	
		06/07/78	24hr comp.	M2-78-49	N.L.	7.5	540	
		06/08/78	24hr comp.	M2-78-54	N.L.	7.5	500	
		06/13/78	24hr comp.	M2-78-59	N.L.	8.17	495	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO								
- Hamilton (WC)		06/14/78	24hr comp.	M2-78-65	N.L.	8.45	475	
(Continued)		06/15/78	24hr comp.	M2-78-70	N.L.	7.55	540	
		06/20/78	24hr comp.	M2-78-87	N.L.	7.2	540	
		06/21/78	24hr comp.	M2-78-92	N.L.	8.0	525	
		06/22/78	24hr comp.	M2-78-96	N.L.	7.6	540	
		06/27/78	24hr comp.	M2-78-103	N.L.	8.0	570	
		06/28/78	24hr comp.	M2-78-110	N.L.	8.1	560	
		06/29/78	24hr comp.	M2-78-113	N.L.	8.2	560	
		07/05/78	24hr comp.	M2-78-119	N.L.	8.05	540	
		07/06/78	24hr comp.	M2-78-123	N.L.	7.95	580	
		07/07/78	24hr comp.	M2-78-126	N.L.	7.4	500	
		07/11/78	24hr comp.	M2-78-131	N.L.	7.55	520	
		07/12/78	24hr comp.	M2-78-141	N.L.	7.25	510	
		07/13/78	24hr comp.	M2-78-146	N.L.	7.2	520	
	Rolling Mill Cooling Water [e]	07/11/78	grab	M2-78-137	N.L.	8.5	550	
		07/17/78	grab	M2-78-148	N.L.	7.09	540	
	Filtration [e]	06/27/78	grab	M2-78-106	N.L.	7.75	560	
	Outfall (East Side)	07/11/78	grab	M2-78-135	N.L.	7.95	540	
		07/17/78	grab	M2-78-152	N.L.	7.05	520	
		07/18/78	grab	M2-78-157	N.L.	7.35	565	
		07/19/78	grab	M2-78-161	N.L.	6.9	525	
	#1 Pumphouse [s]	05/24/78	24hr comp.	M2-78-18	N.L.	8.1	455	
		05/25/78	24hr comp.	M2-78-22	N.L.	8.45	605	
		06/25/78	24hr comp.	M2-78-26	N.L.	8.55	510	
		05/30/78	24hr comp.	M2-78-30	N.L.	8.45	580	
		05/31/78	24hr comp.	M2-78-33	N.L.	8.37	580	
		06/01/78	24hr comp.	M2-78-37	N.L.	8.15	370	
		06/06/78	24hr comp.	M2-78-41	N.L.	8.3	510	
		06/07/78	24hr comp.	M2-78-46	N.L.	8.1	510	
		06/08/78	24hr comp.	M2-78-51	N.L.	7.85	515	
		06/13/78	24hr comp.	M2-78-56	N.L.	7.9	500	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO								
- Hamilton (WC) (Continued)		06/14/78	24hr comp.	M2-78-62	N.L.	8.0	510	
		06/15/78	24hr comp.	M2-78-67	N.L.	8.15	515	
		06/20/78	grab	M2-78-88	N.L.	7.3	540	
		06/27/78	24hr comp.	M2-78-100	N.L.	8.45	560	
		06/29/78	24hr comp.	M2-78-114	N.L.	8.6	580	
		07/05/78	24hr comp.	M2-78-118	N.L.	7.9	550	
		07/07/78	24hr comp.	M2-78-122	N.L.	7.3	480	
		07/11/78	24hr comp.	M2-78-129	N.L.	8.75	505	
		07/12/78	24hr comp.	M2-78-138	N.L.	7.4	545	
		07/23/80	grab	80-111	N.L.	8.6	430	
Combined Lagoon (East side lagoon, filter plant & Depew St. sewers) [e]		06/28/78	grab	M2-78-104	N.L.	7.9	580	
		07/11/78	grab	M2-78-136	N.L.	7.9	520	
		07/17/78	grab	M2-78-150	N.L.	5.8	560	
		07/18/78	grab	M2-78-155	N.L.	7.4	570	
		07/19/78	grab	M2-78-159	N.L.	6.8	525	
Depew Street Sewer [e]		06/27/78	grab	M2-78-107	N.L.	7.05	620	
		07/11/78	grab	M2-78-133	N.L.	7.43	540	
		07/17/78	grab	M2-78-149	44 %	2.4	1180	- LC50 range 40-50%
		07/18/78	grab	M2-78-154	62 %	6.3	580	- LC50 range 40-100%
		07/19/78	grab	M2-78-158	N.L.	6.5	540	
Filtration (East Side) [e]		06/27/78	grab	M2-78-105	N.L.	8.3	560	
		07/11/78	grab	M2-78-134	N.L.	7.7	540	
		07/11/78	grab	M2-78-151	N.L.	6.75	550	
		07/18/78	grab	M2-78-156	N.L.	&.35	570	
		07/19/78	grab	M2-78-160	N.L.	6.9	525	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO - Hamilton (WC) (Continued)	Lagoon Discharge [e]	04/05/78	grab	76-43	75 %	7.6	450	- unaerated LC50 range 56-100 %
	Intake [s]	06/06/78	grab	77-83	N.L.	8.0	430	
	North Trunk Sewer [e]	09/09/78	grab		56 %			- unaerated LC50 range 32-100 %
		05/10/76	grab	76-59	N.L.	7.3	500	- unaerated
		06/06/78	grab	77-77	N.L.	8.1	480	
	Coke Oven byproducts recovery area [p]	06/06/77	grab	77-82	N.L.	8.1	430	
	East Side Lagoon [e]	06/23/69	grab		N.L.			- red belly dace used unaerated
		08/25/75						- red bell dace used unaerated
		06/06/77	grab	77-76	N.L.	8.0	460	- filter building
		06/06/77	grab	77-75	N.L.	7.6	440	
	E Blast Furnace Thickener Overflow [p]	06/06/77	grab	77-81	75.7 %	7.6	740	
	Hot Strip Finishing Mill - black water [p]	04/05/76	grab	76-44	62 %	7.1	620	- unaerated
		05/10/76	grab	76-60	32 %	11.4	915	- unaerated
		06/06/77	grab	77-80	N.L.	8.7		

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STELCO - Hamilton (WC) (Continued)	B,C, & D Blastfurnace Thickener [p]	09/09/75 04/05/76 06/06/77 01/12/78 01/12/78 01/12/78 03/13/78	grab grab grab grab grab grab grab	76-41 77-79 78-1 78-1 78-1 78-1 78-12	1.3 % 0.86 % 4.2 % 5.6 % 0.7 % >10 %* 0.7 %	7.1 7.4 7.4 7.7 7.7 1745 8.0	650 540 750 700 920	- unaerated - unaerated - LC50 range 1-10 % - LC50 range 0.5-1 % - *48 hr test - 10 % dead in 10 % - LC50 range 0.5-1 %
	West Side Open Cut -before once thru from blast furnace [p]	07/23/80	grab	80-114	N.L.	8.0	470	
	Once thru water from blast furnace recirculating system sewer [p]	07/23/80	grab	80-113	2.0 %			
STELCO - Nanticoke (WC)	Final [e]	08/10/80 08/18/80	grab grab	80-131 80-136	N.L. N.L.	8.3 8.6	600 850	
STELCO Welland Tube Works - Welland (WC)	Lagoon Outfall	09/23/81	24hr comp.	81-134	N.L.	7.1	285	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
STRATHCONA PAPER CO. LTD.								
- Strathcona (SE)	Lagoon #9 (Discharge to Napanee River) [e]	06/07/76	grab	M2-76-4	45 %	6.2	580	- unaerated
	Lagoon #7 (Discharge to Napanee River) [e]	06/07/76 09/13/76 07/06/77 05/26/80	grab grab grab grab	M2-76-5 M2-76-37 M2-77-47 80-79	22 % 24 % N.L. 20 %	6.7 6.1 6.5 5.7	525 510 490 510	- unaerated - unaerated - high H ₂ S concentration which has liberated quickly due to aeration - 10 % mortality in 100 %
	Spray Field Runoff [e]	05/26/80 07/12/76 05/30/77 06/06/77	grab	80-79	>10 %	5.7	510	- unaerated
				M2-76-23 M2-77-5 M2-77-46	90 % N.L. N.L.	7.5 6.7 6.4	440 640 620	
SUNCOR								
- Corunna (SW)	Total Effluent [e]	07/12/76 05/29/79 09/29/81	grab grab 24hr comp.	76-123 79-22 81-138	N.L. N.L. *	7.8 8.1 8.0	500 500 363	- unaerated - * 24hr test
	Intake [s]	07/12/76 05/29/79	grab grab	76-124 79-24	N.L. N.L. *	8.3 8.4	420 425	- unaerated - * 24hr test
	Cooling Water [p]	09/28/81	grab	81-140	N.L.			
	Process Water [p]	09/28/81	grab	81-139	N.L.			

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
TECK CORP. - Cart Lake (NE)	Outlet at Cart Lake [d]	07/20/77 07/02/77	grab grab	M1-77-43 M1-77-43	N.L. N.L.	7.3 7.3	335 335	- unaerated
TEXACO - Nanticoke (WC)	Final Holding Pond [e]	06/04/79 06/04/79 04/07/81	grab grab grab	79-43 79-43 81-35	N.L.* N.L. N.L.	8.9 8.9 6.7	4450 4450 2200	- *24 hr test
TEXASGULF - Porcupine R. (NE)	Discharge to Porcupine River [e]	08/09/76	grab	M1-76-21	N.L.	6.1	1200	- unaerated
TOWNSHIP DITCH	At Entry to Polipan Property [p]	06/27/79 08/01/79 08/16/79	grab grab grab	M2-79-6 M2-79-27 M2-79-36	N.L. N.L. N.L.	8.0 8.0 8.1	310 330 260	
	Outfall to St. Clair River [e]	06/27/79 08/01/79 08/16/79	grab grab grab	M2-79-7 M2-79-28 M2-79-37	N.L. N.L. N.L.	8.2 7.9 7.8	233 580 280	
TOWNSHIP DITCH (continued)	South of Railway Bridge [p]	07/26/79	grab	M2-79-17	N.L.	8.3	1800	

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
TRENT VALLEY PAPERBOARD MILLS - Glen Miller (SE)	Final Effluent [e]	06/14/76 09/13/76 06/06/77 05/26/80	grab grab grab grab	M2-76-9 M2-76-56 M2-77-48 80-77	50 % 85 % >100 % 72 %	7.35 7.7 7.1 6.8	230 225 240 345	- unaerated - 10 % mortality in 100 %
	Final West Side [e]	05/26/80	grab	80-78	>100 %	7.0	285	- 30 % mortality in 100 %
TRICIL - Sarnia (SW)	Total Discharge [e]	04/18/77	grab	77-49	22 %	8.5	2600	
UNION CARBIDE - Lindsay (C)	Discharge Pipe [m]	02/16/76 03/08/76	grab grab	76-2 76-12	18 % 11.2 %			- LC50 range 10-32 %
	Intake [s]	02/15/77 03/06/78	grab grab	77-9 78-6	N.L. N.L.	7.7 8.2	440 600	
	Clarifier decant (Final) [m]	02/15/77 02/15/77 02/15/77 02/15/77 03/06/78 03/06/78 03/06/78 03/06/78	grab grab grab grab grab grab grab grab	77-8 77-8 77-8 77-8 78-5 78-5 78-5 78-5	23 % >100 % N.L. 39 % 35 % 23.5 %* 37 % <10 %	8.7 8.0 8.0 7.5 8.9 8.9 8.4 8.4	5220 6800 6800 4200 5200 5200 2400 2400	- 5 % mortality in 100 % unaerated clin. treated - clin. treated - LC50 range 30-50 % stored in 13 days - unaerated * 24 hr test - stored 10 days - stored 10 days - unaerated 10 % killed all fish in 96 hrs.

DATA SUMMARY SHEET

COMPANY NAME and LOCATION	EFFLUENT	SAMPLE DATE M/ D/ Y	SAMPLING METHOD	SAMPLE NO.	96-HOUR -LC 50	pH	CONDUC- TIVITY	COMMENTS
UNION CARBIDE								
- Lindsay (C) (Continued)		03/06/78	grab	78-5	74 %	8.9	4950	- clin. treated
		04/14/78	grab	78-16	34 %	8.3	5200	
		04/14/78	grab	78-16	N.L.	8.3	5200	- clin. treated
UNIROYAL								
- Elmira (WC)	Influent (Carbon Filter) [p]	09/20/76	grab	76-159	6 %	8.0	20000	- LC50 range 5-7 %
		04/12/77	grab	77-40	3.9 %	8.5	33000	- LC50 range 3-5 %
	Effluent (Carbon Filter) [e]	09/20/76	grab	76-160	45 %	8.4	20000	
		09/20/76	grab	76-161	24 %	8.4	20000	- pH adjusted to 6.6
		04/12/77	grab	77-41	22 %	8.7	31000	LC50 range 20-30 %
	South Lagoon [p]	07/14/81	grab	81-107	82 %	4.9	16500	
	Cooling water [e]	07/14/81	grab	81-108	N.L.	7.77	730	-discharge to Canogagique Creek
	Town Water [s]	07/14/81	grab	81-109	N.L.	7.81	740	
WELLAND CHEMICAL								
- Sarnia (SW)	Downstream of Culvert #2	07/28/81	grab	81-114	11 %	4.35	3500	
WILANOUR RESOURCES								
- Red Lake (NW)	Tailings Pond Decant [e]	07/16/79	grab	79-88	N.L.	9.3	350	-unaerated
WILLROY MINES								
- Kirkland Lake (NE)	Tailings Pond Decant [e]	10/29/80	grab	80-205	N.L.	8.3	925	
WINDSOR BUMPER								
- Windsor (SW)	Final Effluent [e]	08/18/75	grab		64 %			